

209090

JPRS-TEP-87-013

2 JUNE 1987



**FOREIGN
BROADCAST
INFORMATION
SERVICE**

JPRS Report

Epidemiology

DTIC QUALITY INSPECTED 2

19981201 130

REPRODUCED BY
U.S. DEPARTMENT OF COMMERCE
NATIONAL TECHNICAL
INFORMATION SERVICE
SPRINGFIELD, VA 22161

29
119
A06

2 JUNE 1987

EPIDEMIOLOGY

CONTENTS

HUMAN

AUSTRALIA

- Televised AIDS Warning Draws 'Outraged' Calls
(Peter White; THE SYDNEY MORNING HERALD, 7 Apr 87)..... 1

BANGLADESH

- Statistics on Children's Deaths From Disease Told
(THE NEW NATION, 6 Apr 87)..... 3

BOLIVIA

- Health Officials Troubled Over Child Mortality Rate
(PRESENCIA, 29 Mar 87)..... 4

- Tuberculosis Ranks Among Major Cause of Death
(EL DIARIO, 16 Mar 87)..... 6

- Health Campaign Directed To Protect Minors
(EL DIARIO, 29 Mar 87)..... 8

Briefs

- Statistics on Tuberculosis 9

BRAZIL

Rio Health Secretariat To Formulate Plan To Control Meningitis (O GLOBO, 8 Apr 87).....	10
Measles, Polio Vaccination Campaigns To Begin in Sao Paulo (FOLHA DE SAO PAULO, 6 Apr 87).....	13
Briefs	
Yellow Fever in Goias	15

CANADA

AIDS Issues, Testing, Incidence Discussed (Various sources, various dates).....	16
Condom Protection Deficiency	16
Ottawa Woman's Contact	17
Large Insurance Policy Testing, by Joan Breckenridge	17
Social Service Agencies Impact, by Dorothy Lipovenko	19
Black Market Drugs Issue	20
Health Minister on Cooperation, by Tonda MacCharles	20
Cases by Category, by Cathy Campbell	21
Health Care Workers Conference, by Joan Breckenridge	22
Contribution to WHO, by Rob Ludlow	23
966 Cases, by Joan Breckenridge	24
Salmonella Strain Reported in British Columbia Cattle (THE SUN, 27 Mar 87).....	25
Cancer Incidence in Nation Among Mill Workers Reported (THE OTTAWA CITIZEN, 1 Apr 87; THE SUN, 1 Apr 87).....	26
National Incidence	26
British Columbia Paper Mill Workers, by Alicia Priest	27
Respiratory Ailments Among Toronto Homeless Discusses (Robert Hoshowsky; THE GLOBE AND MAIL, 30 Mar 87).....	28

EGYPT

Briefs	
Disease Reported in Lake Maryut	29

FEDERAL REPUBLIC OF GERMANY

Briefs	
Soldiers With AIDS Deferred	30

GUINEA

Measles Epidemic Reported (Conakry Domestic Service, 23, 27 Apr 87).....	31
Cases Noted in Kindia	31
Deaths Reported in Tougue	31

HONG KONG

Papers Give Details of Campaign Against AIDS (HONGKONG STANDARD, 27 Mar 87; SOUTH CHINA MORNING POST, 16 Apr 87).....	33
Campaign Director's Remarks	33
More on Hotline, by Michelle Innis	34
Warning To Take Precautions Against Malaria (HONGKONG STANDARD, 6 Apr 87).....	35

INDIA

Briefs	
Rabies Deaths	36

IRELAND

Cuts in Health Service Funding Having Broad Impact (IRISH INDEPENDENT, 25 Apr 87).....	37
AIDS Dementia, Found in UK, Now Anticipated Here (Katharine Donnelly; IRISH INDEPENDENT, 25 Apr 87).....	38
AIDS Victims Increasing; 'Hot Line' Established (IRISH INDEPENDENT, 11 Apr 87).....	39
Briefs	
Testing of AIDS Drug	40

KENYA

Briefs	
Cholera in West	41

LAOS

Pasteurellosis Impact, Treatment, Prevention (Lot Keo; PASASON, 4 Oct 86).....	42
Vientiane Health Authorities on Malaria Suppression (VIENTIANE MAI, 23 May 86).....	43

Vientiane Malaria Work Described (VIENTIANE MAI, 6 Dec 86).....	44
Briefs	
Vientiane Malaria Incidence	45
WHO-Aided Malaria Work	45
Luang Prabang Medical Work	45
LIBERIA	
Mission Ants Invade Kakata City (Joseph Teh; NEW LIBERIAN, 3 Mar 87).....	47
Briefs	
Measles Outbreak in Konoyea	59
MALAYSIA	
Briefs	
Cholera in Kedah	50
Measles in Sabah	50
MOZAMBIQUE	
Health Officials Predict Success of Pemba Vaccination Campaign (NOTICIAS, 24 Mar 87).....	51
Nampula Vaccination Campaign Launched (NOTICIAS, 25 Feb 87).....	53
NEPAL	
Briefs	
Prime Minister Meets Japanese Jaycees	55
NIGERIA	
Briefs	
Yellow Fever Confirmed in Oyo State	56
Measle, Meningitis Deaths in Kano	56
NORWAY	
Statistics on AIDS Cases, Deaths Reported (ARBEIDERBLADET, 22 Jan 87; AFTENPOSTEN, 15 Apr 87).....	57
23 Deaths by January, by Stein Slettback Wangen	57
Government Establishes Information Office	58

PEOPLE'S REPUBLIC OF CHINA

Status, Prospects of Disease Surveillance (ZHONGHUA LIUXINGBINGXUE ZAZHI [CHINESE JOURNAL OF EPIDEMIOLOGY], No 5, 10 Oct 86).....	59
Epidemiological Studies of Trichinella Spiralis Tested (ZHONGHUA LIUXINGBINGXUE ZAZHI [CHINESE JOURNAL OF EPIDEMIOLOGY], No 5, 10 Oct 86).....	64
Long-Term Preservation of Vibrio Cholerae Studied (WEISHENGWUXUE TONGBAO [MICROBIOLOGY], No 4, Aug 86).....	66
Identification of Citrobacter Isolated From Clinical Material (Gao Yi; WEISHENGWUXUE TONGBAO [MICROBIOLOGY], No 3, Jun 86).....	72

PHILIPPINES

Briefs Quezon City Measles Epidemic	76
--	----

ST VINCENT AND THE GRENADINES

Government Hit for Lack of AIDS Policy, Withholding of Data (THE VINCENTIAN, 13 Mar 87).....	77
---	----

SENEGAL

Disease Control Efforts (LE SOLEIL, 7, 9 Apr 87).....	78
Results of Vaccination Program, Marie Saar Mbodj Interview AIDS Types, Incidence, by Fara Diaw	78 80

SWEDEN

Minister Rejects Proposals for Forced AIDS Treatment (SVENSKA DAGBLADET, 31 Mar, 1 Apr 87).....	83
Long Waiting Time for Tests	83
Obligatory Testing Turned Down, Editorial	83
Syphilis, Gonorrhea Cases Post Steady Drop (Anna Jerden; SVENSKA DAGBLADET, 8 Apr 87).....	86

UNITED KINGDOM

Government Says AIDS Death Toll Nears One Per Day (NEWS LETTER, 11 Apr 87).....	88
--	----

Briefs		
	Meningitis Drug	89
ZAMBIA		
Norad Offers AIDS Research Assistance		
	(SUNDAY TIMES OF ZAMBIA, 5 Apr 87).....	90
ANIMAL		
BOLIVIA		
Briefs		
	Foot-and-Mouth Outbreak	91
GUINEA		
Briefs		
	Anthrax Kills Cattle in Dabola	92
ITALY		
Briefs		
	Spread of Foot-and-Mouth	93
LAOS		
Editorial Views Shortcomings in Livestock Vaccination		
	(PASASON, 13 Mar 87).....	94
PLANT		
BOLIVIA		
Briefs		
	Coffee Plague	96
NIGERIA		
Briefs		
	Army Worms Invade Bendel State	97
VIETNAM		
Harmful Insects Ravage Crops in Localities		
	(HANOI DOMESTIC SERVICE, 9 May 87).....	98
Insect Pests, Drought Damage Fifth Month, Spring Rice		
	(NHAN DAN, 21 Mar 87).....	99
Rice Blast Said To Harm 5th Month, Spring Rice		
	(Nguyen Ngoc Thuy; NHAN DAN, 19 Feb 87).....	101

Thanh Hoa, Nghe Tinh Fight Insect Infestation (NHAN DAN, 23 Mar 87).....	103
Crop Pest Infestation Report (Hanoi Domestic Service, 30 Apr 87).....	105
Insects, Drought Damage Rice in North (NHAN DAN, 1 Apr 87).....	106
Briefs North Faces Crop Pests, Drought	108
ZAMBIA	
Red Locusts Invade Southern Province (TIMES OF ZAMBIA, 7 Apr 87).....	109

/12223

TELEVISED AIDS WARNING DRAWS 'OUTRAGED' CALLS

Sydney THE SYDNEY MORNING HERALD in English 7 Apr 87 p 17

[Article by Peter White]

[Text]

ACCORDING to the multitudes of outraged parents who reportedly rang the television channels to complain, it's giving the kids nightmares. Bowling alley proprietors probably aren't sleeping all that well either. It's likely they'll feel that being linked, even if only subconsciously, in the popular imagination with death, disease and destruction isn't going to do much for their industry.

The critics carp that it's too much like a rock video clip, that it's not direct enough, or that scaring people doesn't do any good anyway.

But these objections seem to miss the point. Against all the odds, the new AIDS television commercial has turned out to be a deeply reassuring piece of television — at least when viewed from a historical and sociological perspective.

For those who haven't seen it, the commercial shows a group of ordinary Australians — men, women and children — lined up like nine pins in a ghostly bowling alley. A group of Grim Reapers skittle them with giant tenpin bowling balls while the commentary delivers an AIDS campaign message.

Clearly, the ad makes a very strong case for the continuity of Western culture and civilisation, for that most comforting belief that the past is always with us, that society comes full circle more often than not, that the more things change the more they stay the same. What else can the starring role of the Grim Reaper and his troop of Grim

Reaperettes mean except that the Middle Ages are still with us. The Renaissance and Reformation, the Copernican, the Industrial and the Silicon Chip Revolutions were all very well, but when it comes to the all important question of death, the pre-15th century approach is best.

After all, the Grim Reaper with his scythe and leering skull is about as medieval as you can get. Back then he was constantly popping up in those grand dramatic tapestries, the Middle Age's equivalent of *Dynasty* and *Dallas*, which were so popular with the people in the absence of videos and more animated forms of entertainment. And in miniature form or reduced to the simple device of a skull, the *memento mori*, he can be found tucked away in the corner of many a pre-Renaissance landscape or religious painting.

The point of course was didactic — to constantly remind the people of their mortality, that because of the constant threat of plague and pestilence, the absence of anything like reliable interior heating and the fact that no-one understood about washing their hands before meals, death and the inevitable meeting with the Maker awaited rich and poor, princes and paupers, shepherds and shipwrights alike.

There have been a few Grim Reaper lookalikes over the succeeding centuries who drew heavily upon the original for inspiration. This century's own Darth Vader, the inexorable bringer of

doom, is an obvious example of a Reaper who's simply swapped his scythe for a laser sword.

But now things are much more serious than *Star Wars*. We have our own 1980s version of the Plague and once again it's the genuine article, the *memento mori*, death's own logo, that is required. Appropriately, he's made his appearance in today's most popular form of mass communication, the rock-video style commercial. The medium may change, but the Grim Reaper doesn't.

Admittedly he has taken up ten-pin bowling, a uniquely 20th century pastime — which must be difficult since he plays in a voluminous shroud with the scythe draped over his shoulder — but then the Grim Reaper has always been flexible.

But some will object that the commercial is about a very modern issue — sexual promiscuity. They seem to have missed the point that sex gets very short shrift in the clip.

When an investigative reporter for a leading US television network recently made what she regarded to be a highly critical documentary on the Reagan Presidency, she waited with some trepidation for the White House's

response. To her surprise the President's staff were delighted. As it turned out the program's visuals had featured extensive coverage of the highly orchestrated Reagan campaign rallies and public appearances and the report's criticism was confined to the voice-over commentary. "No-one listens to the words — they only remember the pictures," a delighted White House staff member told the reporter.

Well there's not one reference to sex in the AIDs commercial visuals. It seems likely that it's the Grim Reaper and not sex that viewers will remember.

Of course Australia's AIDS campaigners are not the only coy ones. A recently launched French commercial addressing the same problem featured two rabbits — one white, one brown — rubbing noses suggestively, then disappearing together down a burrow over which the name of a condom is superimposed. Who would have predicted such reserve from the race which invented the *ménage à trois*?

It seems that if it's explicitness you're after you have to look to the graffiti artists of London where the walls have recently begun carrying messages such as "One Bang and You're Dead."

/9317

CSO: 5400/4360

STATISTICS ON CHILDREN'S DEATHS FROM DISEASE TOLD

Dhaka THE NEW NATION in English 6 Apr 87 pp 1, 8

[Text]

Secretary for Health and Family Planning Mr Manjur ul Karim yesterday reaffirmed that the universal child immunisation drive would reach every corner of the country by 1990.

He said the government had a political commitment to bring every child under immunization programme and accordingly all machinery under the Ministry of Health and Family Planning had been mobilised. Besides all possible steps had been taken to provide social support to the programme for its effective implementation.

Mr Manjur ul Karim was briefing the newsmen on the eve of World Health Day about the progress and achievement made so far in the immunization programme undertaken in 1979 at the office of the Health Directorate. High officials of the Directorate of Health and the expanded immunization programme were present on the occasion.

He said the theme of World Health Day, '87 is 'Immunization: A chance for every child,' Bangladesh highly regarded the theme of World Health Day and the press briefing was arranged to project how much progress Bangladesh had made in regard to immunization of children for saving them from premature death.

Giving a brief resume of the

activities of the World Health Organisation (WHO), the Health Secretary said since 1950 WHO repeatedly emphasised the importance on creating awareness among the people all over the globe about child health. He commended the activities of WHO for its active assistance to the countries including Bangladesh for upgrading the standard of public health in general and child health in particular.

Giving details of the activities of the expanded programme on immunization, the Health Secretary said 70 upazilas had already been brought under the programme and another 120 upazilas would be included under the programme in July next year. The remaining upazilas would be covered by the programme within July 1989, he added.

About creating awareness among the parents about child health in the rural areas, the Health Secretary said steps had been taken to ensure three vaccinations for their children upto one year age group for immunization from the killer diseases.

The Health Secretary said about 830,000 children below five years die of various diseases in Bangladesh annually. Of these, he pointed out, about 250,000 children are the victims of six killer diseases namely diphtheria, tetanus whooping cough, measles, poliomyelitis and tuberculosis. He said

tetanus itself alone claims 230,000 children's lives every year while measles take 40,000 children. He said pertussis (whooping cough) attacked upto 30 children in every thousand and accounts for 4800 death and 9900 cases of paralytic polio occurred every year. The tuberculosis causes death to 1000 children a year, he added.

The Health Secretary said the programme of child immunization got impetus with President Ershad's personal and his government's commitment made at the General Assembly session in October 1985.

Mr Manjur-ul-Karim said field workers were engaged in motivating the parents about the need of vaccination for their children and the political leadership at the upazilas were joining the campaign to make the immunization programme a success. The response from the parents were very encouraging.

He said at present 27000 workers have been engaged in the task of mobilising and creating awareness among the parents about the necessity of child vaccination.

About the preservation of vaccines, the Health Secretary said proper arrangements had been ensured to preserve the medicines in due temperature at the capital, district and upazila levels. The medicines were always to be certified by the WHO, he added.

HEALTH OFFICIALS TROUBLED OVER CHILD MORTALITY RATE

La Paz PRESENCIA in Spanish 29 Mar 87 p 1

[Text] UNPAF has established that 170 out of every 1,000 children under 1 year of age die each year in Bolivia. This was revealed by a mission of experts visiting the country.

Mariano Requena, Cesar Chelala, and Teresa Aguirre told PRESENCIA: "There is concern about the high infant mortality rate. Bolivia has the highest rate in the entire world."

The technical study was done to determine the condition of the mother-child population in urban, rural, and urban-rural areas in the departments of La Paz, Oruro, Potosi, Cochabamba, Santa Cruz, and Chuquisaca. Dr Chelala said: "The conclusions show the need to expand the aid programs that UNPAF offers through the third phase of PRONIMA [Mother-Child Program].

"The objective of this evaluation is to identify both the positive and negative factors that affect achievement of the objectives of the PRONIMA III project as well as the problems, needs, and possibilities in mother-child health."

This information will be used to design a new request for cooperation which the Bolivian Government will present to UNPAF under the title PRONIMA III. It will formulate the project with the executing agency formed by PAHO and the Ministry of Social Services and Public Health.

Chelala reported that each project is developed over 3 years at a cost of \$1.5 million--that is, \$500,000 per year.

Characteristics

The mission established that work in rural zones is done under precarious conditions by poorly paid professionals with inadequate supplies. Each operational base faces social problems caused by the differences between traditional or local medicine and orthodox medicine which compete for control of each zone. He said that the program plans to have native volunteers work with the people in each region to introduce the orthodox systems.

The objective of the program is to develop projects, train specialized personnel (doctors, nurses, aides), produce educational material for the communities, and offer direct support through medicine, medical care, etc. The international organizations that participate in PRONIMA also offer resources for social research in the three areas of the community: urban, rural, and urban-rural.

Statistics

UNPAF is concerned about the high mortality rates in Bolivia, especially due to the structural conditions of the health services. With a population of more than 6 million, only 38 percent have medical insurance. About 72 percent are neglected.

There are 695,000 children from 1 to 4 years of age in Bolivia who need constant attention and there are 1,114,000 women of childbearing age--that is, from 15 to 49. Of every 1,000 babies born, 170 die before the age of 1. The general mortality rate is 27 for every 1,000 people.

7717

CSO: 5400/2039

TUBERCULOSIS RANKS AMONG MAJOR CAUSE OF DEATH

La Paz EL DIARIO in Spanish 16 Mar 87 p 2

[Text] Tuberculosis is the major problem among transmissible diseases in our country and is one of the top five causes of death, according to the latest research of the Ministry of Social Services and Public Health.

According to available statistics, it is the third highest cause of death in people over 15 years of age. The highest rates of incidence correspond to Riberalta, Chuquisaca, Trinidad, Santa Cruz, and Cochabamba. The rate of prevalence is 1.4 percent.

The 3-Year Health Plan for 1987-1989 gave national priority to control of this serious disease. The first steps were taken last November: the preparation and training of human resources at all levels of the health services system.

According to reports from those in charge of the program, the Health Unit gave courses in urban and rural areas on Updating Standards and Procedures for Tuberculosis Control and Standardization of Laboratory Diagnosis Techniques.

General Ideas

According to the Manual of Norms and Procedures for Tuberculosis Control drawn up by technicians of the Ministry of Public Health, tuberculosis is an infectious disease of chronic evolution produced by a pathogenic germ called the Koch bacillus. The causative microbe is found in certain social and environmental conditions resulting from the way our society is organized to produce and reproduce.

The disease is transmitted from a sick person to a healthy one through the cough. The small drops of saliva in the air can be contaminated with bacillus and these can be inhaled by a susceptible person. They later penetrate the lungs through the bronchi.

According to the clinical explanation, tuberculosis can easily endanger human organs or tissues (kidneys, joints, genitals, meninges). The pulmonary form is the most common and of greatest epidemiological importance.

The cough is the initial symptom followed by expectoration and fever. No matter how the disease begins, the primary signs are general decline, emaciation, perspiration, fever, persistent cough, and expectoration.

The disease is detected basically by identification of the causal agent through a microscope. A chest X-ray itself does not detect or diagnose; specialists use it as a complementary method.

Tuberculin Test

This is used to diagnose the natural infection produced by the bacillus and by the vaccine BCG. It can be used for the following objectives: the differential diagnosis of extrapulmonary and infantile tuberculosis; and determination of the risk of infection in the community (study of unvaccinated children).

This test is done with syringes and hypodermic needles similar to those used for the BCG vaccination. It consists of a single intradermal application of the vaccine in the right shoulder. The vaccine does not produce any general reaction. After application, a nodule forms that tends to ulcerate and disappear after 8 or 10 weeks. During the normal evolution of the vaccine, no ointment, salve, dressing, or disinfectant should be used.

7717

CS0: 5400/2039

HEALTH CAMPAIGN DIRECTED TO PROTECT MINORS

La Paz EL DIARIO in Spanish 29 Mar 87 p 6

[Text] The Ministry of Social Services and Public Health has started to distribute more than 10 tons of vaccines, medicine, and laboratory material to be used in the first social mobilization for the Health of the Bolivian Child next 12 April.

The national director of epidemiology, Dr Jorge Mariscal, reported that all supplies plus forms and publicity material should reach the urban districts before 5 April to guarantee the success of the first social mobilization to combat infectious or contagious diseases like tuberculosis, measles, polio, tetanus, and diphtheria. Also tablets of Mebendazol will be administered to eliminate parasites from children under 9. There will also be units for oral rehydration and arrest of acute respiratory infections.

He revealed that the national transportation capacity has been saturated because 2,600 cubic meters have been mobilized for these supplies. Different transportation enterprises are supporting this, especially in places that are hard to get to.

The National Directorate of Epidemiology has sent the health units 1,255,860 doses of polio vaccine, 775,500 doses of triple vaccine, 580,520 for measles, 1,255,860 syringes--that is, one for every child--and 4,366,200 500-mg tablets for the program to eliminate parasites.

Tuberculosis

During the present period, the Ministry of Public Health, in collaboration with international organizations, will give priority to fighting this scourge. A vaccination campaign for 486,309 children younger than 3 began on 15 March. Starting on 12 April, 107,000 children included in the first basic course will be revaccinated.

Right now they are attempting to find and treat 10,000 cases of tuberculosis. For this reason, 5,000 health workers were trained in clinical laboratory, therapeutics, and epidemiological management.

According to an analysis of the problem of tuberculosis in the country, the greatest deterioration is seen in the abandonment of treatment. This involves more than 40 percent at the national level.

BRIEFS

STATISTICS ON TUBERCULOSIS--The regional director of the Tuberculosis Control Program, Oscar Lanza, said during the fourth course to update norms and procedures for tuberculosis control that 47 out of every 100,000 people die from that disease in Bolivia. About 360 contract it with the serious risk of infecting their relatives or social group with whom they live. He indicated that tuberculosis in Bolivia can be considered a chronic disease "considering the patients' high rate of abandonment of treatment and control of the disease that lasts at least a year." He maintained: "It is not required for the patient to recover totally. However, we must confront the pathology of this situation because there is the risk that a single case can infect 10 people in one day." He stated that the alarming prevalence in the mining zones of the departments of Potosi, Oruro, Yungas in La Paz, and the east "led to the formation of the National Committee Against Tuberculosis by institutions involved with that problem." Oscar Lanza said that the people should assume the responsibility of taking care of their own health through adequate health education, participation in immunization campaigns, and medical checkups every 6 months to eliminate the sources of infection. Oscar Lanza also referred to the fourth course to update norms and procedures for tuberculosis control. He said: "Its objective is to make the procedures for the control of this disease uniform and to share knowledge that enables us to do effective work." More than 100 doctors from rural areas and members of the Bolivian Society of Respiratory Specialists, Bolivian Medical Society for Public Health, and the Pediatrics Society are participating in the course. [Text] [La Paz PRESENCIA in Spanish 12 Mar 87 p 7] 7717

CSO: 5400/2039

RIO HEALTH SECRETARIAT TO FORMULATE PLAN TO CONTROL MENINGITIS

Rio de Janeiro O GLOBO in Portuguese 8 Apr 87 p 11

[Text] The Department of Epidemiology and Disease Control of the State Health Secretariat has established a technical committee to draft a meningitis control plan in Rio de Janeiro, especially aimed at the meningococcic type, which has already hit 87 persons this year, 25 of whom died. The plan will also involve teams from the secretariats of education and of municipal health in an effort aimed at schools, dissemination of information throughout the country, upgrading of laboratories to improve diagnoses, and increase in the number of available beds in hospitals taking care of meningitis cases.

According to statistics updated yesterday by the Department, meningitis cases of all kinds totaled 340 this year, below the number recorded during the first quarter of 1986, which was 473. But doctors are concerned with the increase in the rate of the meningococcic type (which is communicable) from 46 to 87 during that same period of time.

Department director Fernando Laender yesterday visited the St. Sebastian Hospital in Caju to inspect its installations and take a look at the medical care conditions for the 60 persons with various epidemiological diseases there. During the inspection, he found that it is necessary to streamline the work of two wards--only one of them is operating--as a preventive measure so as to be able to cope with a possible increase in the rate of meningitis in the state.

"The numbers so far do not point to an upsurge but we cannot just stand by and do nothing. We have to take some precautions. We have already gotten another eight beds in St. Sebastian but the hospital needs two wards because it is already overloaded."

Maria Augusta Torres Machado, director of the Epidemiological Surveillance Department, advocates a public awareness program and some steps to prevent the risk of an epidemic. She explained that out of the 87 cases of meningococcic meningitis discovered, 3 are of type A, 2 are of type C (both were vaccinated) and 16 are of type B (these were not vaccinated). Another observation has to do with the increase in the age groups among patients.

In addition to projects for the increase in the number of beds and the improvement of laboratory diagnoses, the plan being drafted by the Department calls for a guidance service in public and private schools on procedures to be adopted whenever disease cases are confirmed. Among the recommendations, it was suggested that the school management must not close the establishment. The first step must be a report to the health post or center of the region.

Another initiative will be represented by the public awareness drive concerning the characteristics and forms of avoiding meningitis; this will be carried out through the press.

Meningococcic Meningitis Cases and Deaths in 1987

Rio de Janeiro	Jan 8	Fev 9	Março	Total 10	Óbitos
Estado/86 1	15	19	12	46	16
Estado 7, 2	32	26	29	87	25
Região Metropolitana 3	27	23	27	77	22
Rio de Janeiro	16	17	17	50	15
Duque de Caxias	1	1	1	3	1
Magé	—	—	1	2	1
Nilópolis	1	—	1	3	—
Niterói	2	—	1	3	—
Nova Iguaçu	3	3	6	10	4
São João Meriti	2	1	1	4	1
Petrópolis	2	—	—	2	—
Região Médio Paraíba 4	—	—	1	1	—
Resende	—	—	1	1	—
Região Norte 5	—	1	—	1	1
Campos	—	1	—	1	1
Região Baixa Litorânea 6	5	1	1	7	1
Macaé	2	—	—	2	—
Cabo Frio	1	1	1	3	—
Conceição Macabu	2	—	—	2	1
Região Serrana 7	—	1	—	1	1
Teresópolis	—	1	—	1	1

6. Lower Shore Region

7. Mountain Region

8. February

9. March

10. Deaths

Note. The Epidemiology Department of the State Health Secretariat recorded 50 cases in the township of Rio but the Municipal Secretariat has already updated the figures and came up with 54 cases.

Source: Department of Epidemiology and Disease Control, State Health Secretariat.

5058

CSO: 5400/2040

MEASLES, POLIO VACCINATION CAMPAIGNS TO BEGIN IN SAO PAULO

Sao Paulo FOLHA DE SAO PAULO in Portuguese 6 Apr 87 p A-1

[Text] Governor Orestes Quercia, in the course of a solemn ceremony scheduled for 1500 tomorrow in Bandeirantes Palace, will order mass vaccination drives against measles and polio with dates scheduled, respectively, for 11-22 May and 23 May. Alaide, the governor's spouse, will be the general campaign coordinator as part of an overall child assistance program to be likewise announced tomorrow. The intention is to have the signing of the decrees to coincide with the commemoration of World Health Day, instituted by the WHO; the topic this year will be "Vaccination--the Right of Every Child."

Vaccination against measles will probably be emphasized. A significant increase in the number of cases has been observed since last year, unrelated to the disease's "endemic peaks," which usually come in 3-year cycles. In addition to this, there has been a change in the age profile of the patients. According to research conducted by the CVE (Epidemiological Surveillance Center) of the Health Secretariat, there has been a "shift" toward the higher age groups, including young adults.

In view of these facts, the Governor will determine that children and adolescents between 9 months and 14 years will be vaccinated; the total number has been estimated at 10,320,000 persons throughout the state. Children over the age of 14 are excluded for operational reasons and because of the as yet unknown risk inherent in vaccinating pregnant women. In some regions, immunization against measles will in exceptional cases be administered along with the polio vaccine, using the same health team.

Interpretations

In 1984, Sao Paulo experienced a "peak" in the disease which in the end reached epidemic levels with 4,865 cases recorded and 261 deaths. However, 2 years later, counting patients in hospitals and those taken care of on an out-patient basis, the figure went up to 7,376 cases and the total number of deaths is as yet unknown (the survey is being made on the basis of death certificates).

According to Alexandre Vranjac, 44, CVE coordinator, the "violent" increase in reports can be interpreted in various ways. First of all he mentioned the institution, last June, of mandatory registration of cases taken care of on an out-patient basis; until that time, only in-patient cases were registered. On the one hand, this measure represents progress in keeping tabs on the epidemiological development of measles; on the other hand it served to eliminate one parameter: the numbers ceased to be comparable.

The increase in the number of cases also involves vaccination criteria. Until 1984, the children received two doses--at the age of 7 and at the age of 15 months--after which they received a single dose at the age of 9 months [as published]. The change was justified by the low efficiency of immunization at the age of 7 months (50 percent) and the rather small number of mothers who showed up to make sure that their children would take a booster dose. However, according to Vranjac, only about 80 percent of the children vaccinated at the age of 9 months developed antibodies against the disease. In addition to that, there is the fact that about 20 percent did not take any vaccination so that the real coverage of the population came to around 70 percent. That left a very wide margin of persons liable to contract the disease. The criterion to be used this year therefore is to administer one booster dose at the age of 18 months.

Another question raised has to do with the fact that vaccines were subjected to quality control by the Health Ministry only starting in 1983; before that they were imported and they were very little heat-stable. This, combined with the shortcomings in the refrigeration chain (refrigerators) at the health centers, may have impaired the effectiveness of immunization.

Number of Measles Cases in Sao Paulo

Year	Cases
1983	2,152
1984	4,865
1985	1,921
1986*	7,376
1987* (until March)	1,229

*Starting in October 1986, out-patient cases were registered and these were added to the in-patient cases.

5058

CSO: 5400/2040

BRIEFS

YELLOW FEVER IN GOIAS--Goiania. A new outbreak of yellow fever in Goias, within a span of a week, has already resulted in 4 deaths and more than 12 cases of persons suspected of having contracted the disease. The first outbreak came in Goias City, the former state capital, 120 kilometers from Goiania, where, on Monday of last week, the SUCAM (Superintendency for Public Health Campaigns) delegation announced two deaths caused by the disease, plus "six suspected cases." Yesterday, SUCAM, through Epidemiology Section Chief Elisabeth Silva de Oliveira, announced that there had been another two deaths, one in the former capital, and another one in the District of Fraternidade, Township of Alto Paraizo, 421 kilometers from Goiania, as a result of an outbreak of yellow fever. The SUCAM doctor emphasized that this can be described as an epidemic of the disease in Goias and she explained: "For every death there are at least ten hidden cases of the fever, in other words, people who can be contaminated." [Text] [Rio de Janeiro O GLOBO in Portuguese 9 Apr 87 p 10] 5058

CSO: 5400/2040

AIDS ISSUES, TESTING, INCIDENCE DISCUSSED

Condom Protection Deficiency

Ottawa THE OTTAWA CITIZEN in English 3 Apr 87 p A10

[Text]

TORONTO (CP) — Health-care professionals are promoting safe sex through the use of condoms, but some may not be all that safe.

Experimental studies show natural membrane condoms made from lamb intestines can leak the AIDS virus, researchers say in the CBC radio program, *Quirks and Quarks*, to be broadcast Saturday.

In tests on natural membrane condoms, Dr. Suzanne Sprecher of Brussels said, researchers forced a liquid carrying the AIDS virus into the condoms, which was then placed in a tube containing a material to pick up any leakage.

Analysis of the material showed it had absorbed viral cells for acquired immunodeficiency syndrome. The disease,

which is transmitted sexually and through blood products, attacks the body's immune system, making it defenceless against a wide variety of diseases.

Sprecher, director of the AIDS laboratory at the Pasteur Institute, said that when latex condoms were tested, AIDS virus did not seep through the material and that those filled with spermicide caused the virus to become inactive.

"The best (one) is a condom made in latex and also which is filled with spermicide," she said.

Dr. Gerald Minuk, an associate professor in the department of medicine at the University of Calgary, said he has tested condom tips under a sophisticated electron microscope and found those made of a synthetic material had no breakage or holes in the surface.

Ottawa Woman's Contact

Vancouver THE SUN in English 3 Apr 87 p A17

[Text]

OTTAWA — An Ottawa woman has become the first female in Ontario known to have developed AIDS through sexual contact with a male carrier of the virus, the regional health department reported Thursday.

The woman, in her 20s, tested positive for the AIDS antibody last year and now has the deadly disease. She has not been identified by the department.

She is not a prostitute and health officials say it's unlikely she has transmitted the virus to others.

Doctors have refused to disclose

any details about the person who infected her.

Dr. Ian Gemmill, associate medical officer of health, said the woman had sexual intercourse with someone from the AIDS high-risk group, which includes men who have sex with other men, hemophiliacs, Haitians and intravenous drug users.

Four other Ottawa-area women have tested positive for the AIDS antibody. One died from the disease in 1985 but doctors couldn't determine how she contracted it because it was discovered during an autopsy.

Large Insurance Policy Testing

Toronto THE GLOBE AND MAIL in English 4 Apr 87 pp A1, A2

[Article by Joan Breckenridge]

[Text]

Canadians buying large amounts of life or health insurance must now take a mandatory AIDS antibody test or risk being denied coverage, industry spokesmen say.

Although the spokesmen said applicants are being told about the test, in Ontario at least one case has emerged where testing was done without informed consent.

In another instance, the confidentiality of a positive test result was compromised when the applicant received the information by mail, said Dr. Catherine Hankins, a public health epidemiologist and member of the National Advisory Committee on AIDS.

The test is being done on men and women of all ages, said Dr. Walter Schlech, an expert on infectious diseases who is also a member of the committee. Each company decides for itself what size of policy should warrant a test, he said.

According to Charles Black, vice-president of insurance operations for the Canadian Life and Health Insurance Association, the testing begins on policies ranging from \$200,000 to \$500,000 and up.

And many companies have started to ask on application forms whether the applicant has ever been diagnosed as having AIDS, Mr. Black said.

The testing is being done to protect the industry from what it perceives to be an unacceptable amount of risk, he said.

Because policies are considered "a good-faith contract, if one party says they won't take the test, the other (the insurance company) will say no way" to granting a policy, he said.

"Right now anybody with a positive AIDS antibody test is considered uninsurable," Dr. Schlech said.

However, the industry has agreed to not discriminate against high-risk groups. "They cannot exclude a gay man from holding a policy if he's antibody negative," said Dr. Schlech.

In at least one instance the policy regarding informed consent seems to have been breached.

James Hathaway, a professor at Osgoode Hall Law School and a spokesman for the Right To Privacy Committee, said the case involved a man who did not authorize the test. An insurance company did it anyway and the man tested positive.

"People should have the right to decide whether they want to have the test done and whether they want to know the results," said Mr. Hathaway. Many people avoid the test because a positive result can be psychologically devastating, he said.

Philip Shaw, a spokesman for the AIDS Committee of Toronto, said denying insurance because of a positive test is a form of discrimination because a positive test does not mean the person will develop AIDS, he said.

A positive test for AIDS antibodies indicates a person has been exposed to the virus. However, it is currently estimated only 30 to 50 per cent go on to develop AIDS and it takes anywhere from three to 15 years for symptoms to appear.

Mr. Hathaway said he suspects many companies do the test without formal consent but "in 99 per cent

of the cases, no one (tested) is going to say anything." Only someone who tests positive finds out the test was done and he would not want anyone else to know the results, he said.

Dr. John Walker, medical director for London Life Insurance Co. in London, Ont., said his company always asks for formal consent. Applicants must read and sign a form that mentions screening for the AIDS virus.

He said no one actually tells the applicant verbally that this test will be done. In his opinion, "the fact that you stick out your arm and let me do it is very strong implied consent."

It was London Life that sent information about a positive result to an applicant in the mail. Dr. Walker said he had no choice because the individual did not have a family doctor to whom the results could have been sent. And he will not give out results over the phone.

Although Dr. Walker said only people applying for more than \$500,000 in insurance are now tested by the company, he wrote in this applicant's letter that "all of our blood chemistry profiles are assayed for human immunodeficiency virus."

AIDS destroys the body's ability to fight off disease and is always fatal. It is transmitted through bodily fluids like blood and semen. An estimated 50,000 Canadians have been exposed to the virus.

Social Service Agencies Impact

Toronto THE GLOBE AND MAIL in English 6 Apr 87 p A9

[Article by Dorothy Lipovenko]

[Text]

At least 100 people with AIDS — more than 20 per cent of Canadians with the fatal disease — have been forced to go on social assistance because they are too ill to work and have inadequate disability benefits.

Many have gone virtually overnight from financial independence to poverty, once their 15 weeks of medical benefits under federal unemployment insurance expires.

"People tend to think in terms of health-care dollars but the massive impact of AIDS will be the (expense) of social services," says Yvette Perreault, a worker with the AIDS Committee of Toronto.

Several community groups involved in counselling people with AIDS have set up food banks and small emergency funds, dependent entirely on donations, to help with rent, food or prescription drugs.

Even telephone bills can suddenly skyrocket, as people ill and alone feel the need to be close to out-of-town family.

In Toronto, several people with AIDS have found temporary housing at hostels because they cannot afford an apartment.

Spokesmen for several community groups working with AIDS patients say the financial situation is desperate for some. "I've known some people to sell their drug prescriptions (for painkillers) on the black market to have some income," says James Agar of the Winnipeg Aids Advisory Council.

In Vancouver, one man with AIDS is spending up to \$300 a month — half his welfare income — for drugs smuggled in from Mexico and the United States that are unavailable in Canada to treat the disease.

The rapid and debilitating nature of the illness also has required municipalities in Ontario to give priority to people with AIDS, so they can be processed quickly and allowed to obtain the higher provincial family benefits.

Social service agencies are just starting to feel the impact of AIDS as they grapple

with the variety of special drugs, diets and medical equipment patients need to live at home, but which have not traditionally been covered under provincial drug benefit or welfare programs.

For example, Metro social services has decided it will pay for Ensure, a nutritional canned drink consumed by AIDS patients who need it as a dietary supplement. A month's supply can cost \$90 or more.

A special catheter that allows a person to self-administer drugs intravenously costs several hundred dollars. After he was released from hospital it took one person at least a week of frantic phone calls to get the funds from Metro to buy the device.

The majority of people in financial difficulty are single men between 25 and 40, who depleted their savings after falling sick or have no disability insurance because they didn't expect to become terminally ill at their age, Ms Perreault said. "How can you deal with death and dying when you cannot find adequate, affordable housing?"

Ontario's first hospice for AIDS patients is to open soon, but is meant for people in the final stages of the illness, Ms Perreault noted, and not those needing housing for several months or a year.

Ontario and B.C. have the most people with the disease living on social assistance. In Metro Toronto, 12 to 15 people with AIDS are on municipal welfare and at least another 20 to 25 are receiving provincial social assistance (family benefits). In Vancouver, 35 to 40 people with the disease are, or have been, on provincial assistance. Community spokesmen in Montreal, Winnipeg and Calgary report smaller numbers.

Ms Perreault says the Ontario figures are "ridiculously low," reflecting "only the tip of the iceberg," because many people with AIDS-related illnesses are receiving family benefits but are not designated by the province as having AIDS.

Black Market Drugs Issue

Ottawa THE OTTAWA CITIZEN in English 8 Apr 87 p A5

[Text]

TORONTO (CP) — In a desperate attempt to prolong their lives, people with AIDS are bringing thousands of dollars worth of overpriced, non-prescription drugs into Canada from Mexico and the United States, spokesmen for community-based AIDS groups say.

The drugs, some of which are undergoing clinical trials and are unavailable in Canada, are being bought over the counter in Mexican pharmacies and on the black market in major U.S. cities, the spokesmen said.

Most of the activity is taking place in British Columbia and Ontario, the provinces where most AIDS sufferers in Canada live.

"There's quite an underground movement," said Robert Tivey, a spokesman for AIDS

Vancouver.

"You've got nothing to lose when you're sick and know you're going to die."

The black market is expected to grow because the federal government is not licensing experimental AIDS anti-viral or immune system booster drugs for prescription sale, AIDS groups say.

In some cases, people with AIDS living on meagre disability pay are nevertheless spending thousands of dollars in pursuit of a drug that will delay the spread of the virus.

In Canada, it is not illegal to bring most of the drugs into the country as long as they are not sold to others, said Dr. Michael Davis, chief of the infection and immunology division of Health and Welfare Canada in Ottawa.

Health Minister on Cooperation

Ottawa THE OTTAWA CITIZEN in English 10 Apr 87 p A4

[Article by Tonda MacCharles]

[Text]

A proposal for a joint Canada-U.S. assault on AIDS that was backed at the Mulroney-Reagan summit this week should focus on the disease's social and psychological impact, federal Health Minister Jake Epp suggested Thursday.

So far, the emphasis has been on the scientific, said Epp, speaking to more than 500 health and social service professionals from North America at a conference here on the care of terminally ill AIDS patients.

More research and understanding needs to be generated on the social, psychological, spiritual and legal questions AIDS patients and those around them must wrestle with, he said.

"Irrational fears and prejudice" must be dispelled, and the dying person's dignity and comfort assured, said Epp. "We're dealing first with people, regardless of the source of their infection."

Asked by reporters to clarify what form of cross-border co-operation he is seeking, Epp said he is waiting for the national advisory committee on

AIDS and senior Canadian and U.S. bureaucrats to identify the gaps that need to be filled.

Depending on what those sources tell him, more funding could be applied to joint efforts in battling the disease and treating its victims, he added.

Prime Minister Brian Mulroney and U.S. President Ronald Reagan agreed Sunday that Canadian and U.S. health agencies should increase bilateral co-operation in the fight against AIDS.

Epp said he favors a shift away from hospitals to community-based services, such as hospices that create a home-like environment for those dying of AIDS.

But the actual delivery of health care comes under provincial jurisdiction.

Epp said while the federal government could not get involved in direct funding of hospices, it would be prepared to fund more research into the development of palliative care for AIDS patients in Canada.

Cases by Category

Ottawa THE OTTAWA CITIZEN in English 10 Apr 87 p B1

[Article by Cathy Campbell]

[Excerpt]

THE SITUATION IN CANADA

Adult cases by risk category*	Alive	Dead	Total(%)
Homosexual-bisexual male**	406	392	798 (82.6)
Intravenous drug abuser	1	3	4 (0.4)
Recipient of blood or blood products	13	21	34 (3.5)
Heterosexual partner of high-risk person	10	13	23 (2.4)
Person from endemic area***	19	42	61 (6.3)
Other/unknown	14	13	27 (2.8)
Pediatric cases by risk category			
Children 1-14 years old			11 (1.1)
Parent at risk****	2	6	8
Blood transfusion recipient	3	0	3
Infants under 12 months old			8 (0.8)
Parent at risk****	2	5	7
Blood transfusion recipient	0	1	1

— Laboratory Centre for Disease Control

* Mutually exclusive in the order listed. For example, the category of intravenous drug user does not include any who are also homosexual or bisexual males.

** 27 of the 798 homosexual-bisexual males also use intravenous drugs.

*** Endemic areas include Haiti and Central Africa.

**** Children who were infected by the mother before or during birth.

	Alive	Dead	Total
Adult			
Male	445	456	901
Female	18	28	46
Infant			
Male	4	7	11
Female	3	5	8
Total	470	496	966

Using wartime-like measures, governments worldwide have mobilized to fight AIDS through education campaigns, television, radio and newspaper advertisements.

Only in the last year or two have health officials begun to grasp the magnitude of the problem and its potential for wiping out millions.

No form of sexual contact — vaginal, anal or oral — is now considered safe.

At the Centers for Disease Control, home of America's frontline medical troops, more money and manpower is being devoted to the

fight of AIDS than any other ailment — \$86 million in 1987.

Researchers estimate at least \$400 million is being invested in AIDS research this year in the United States by federal agencies, university researchers, private companies, state and county governments.

In Canada, the federal government is spending \$39 million over five years on AIDS research and awareness.

In Great Britain, where there have been about 650 reported cases of AIDS, \$40 million is going into the AIDS fight this year alone.

Health Care Workers Conference

Toronto THE GLOBE AND MAIL in English 11 Apr 87 p A1

[Article by Joan Breckenridge]

[Text]

OTTAWA

Since 1984, a team of medical professionals have been quietly tracking the sexual contacts of a man who refuses to practice safe sex despite the fact that he has been diagnosed as being an AIDS carrier.

Through this young man, an Inuk, acquired immune deficiency syndrome has invaded at least one isolated Canadian Inuit community.

And in Montreal, a woman has been exposed to the virus because her homosexual husband refused to tell her he was carrying it.

AIDS carriers like these who refuse to protect their sexual partners are hampering efforts by the medical community to stem the spread of the virus, health care workers were told yesterday at a

conference here.

Examples of this kind prompted speakers at the two-day meeting on palliative care (treatment of the dying) to raise many difficult and sometimes unanswerable questions about the ethical and moral issues surrounding the care of AIDS patients.

Should society quarantine irresponsible individuals, or would it be better to put them in prison or mental hospitals? What about chemically induced castration? Should a doctor tell a wife her husband has AIDS against the husband's wishes?

The U.S. Surgeon-General has said that "quarantine might be considered in certain cases of rampant irresponsibility," said Dr. David Roy, director of the centre

Contribution to WHO

Ottawa THE OTTAWA CITIZEN in English 16 Apr 87 p A11

[Article by Rob Ludlow]

[Text]

Canada is contributing \$5 million to the World Health Organization's new \$37-million war on AIDS, Health Minister Jake Epp and External Relations Minister Monique Landry announced Wednesday.

The announcement comes as the number of Canadian AIDS cases is expected to top 1,000 in the next few days, double the level of 18 months ago.

The \$5 million will be delivered through the Canadian International Development Agency for which Landry is responsible. Epp and Landry said the battle against AIDS in Canada can only succeed in tandem with the special WHO international campaign.

Epp said Canada's contribution is "part of a global response to this pandemic situation which is now in about 100 countries in every region of the world."

Unlike childhood diseases, AIDS usually targets adults who are the most productive members of society, especially in developing nations, Landry said.

"This is a threat such as we have never seen before."

Epp said most of the Canadian funds will be used for education of medical personnel in Third World countries where multiple use of hypodermic needles is common practice for economic reasons.

Epp also said he plans to ensure that "Canada gets its fair share of AZT," an experimental drug manufactured by the British firm Burroughs Wellcome.

AZT is not a cure for AIDS but has been shown to relieve symptoms and prolong the lives of AIDS sufferers.

Ten countries, including the United States, have approved prescription use of the drug but Canada is still conducting clinical trials.

Of the approximately 1,000 AIDS cases diagnosed in Canada since the early 1980s, more than half have died. Most people diagnosed in 1983 are dead, three-quarters of those diagnosed in 1984 have died and only about half of those diagnosed in late 1985 and early 1986 are still alive.

More than 80 per cent of Canadian AIDS victims are homosexual or bisexual males.

British Columbia continues to have the highest AIDS rate in Canada with 74 cases per million of population, far in excess of 41 per million in Ontario and Quebec.

Toronto THE GLOBE AND MAIL in English 16 Apr 87 p A8

[Article by Joan Breckenridge]

[Text]

The Quebec Government has killed a provincial AIDS advertising campaign because the ads place too much emphasis on the use of condoms, a Government spokesman said.

The \$60,000 campaign has been judged unacceptable by Health and Social Services Minister Thérèse Lavoie-Roux because "it was like an ad for condoms versus sexually transmitted disease," ministry spokesman Bernard Daudier said.

Ms Lavoie-Roux also objected to the television, radio and print ads being oriented toward young adults between the ages of 15 and 24 rather than the general population, he said in a telephone interview from Quebec City.

He said she had "asked for a program to sensitize the population at large to sexually transmitted disease."

Quebec has the second-largest ratio of AIDS patients to population. Of the 966 diagnosed cases of AIDS in Canada, Quebec has 274, of which 124 are still alive. Ontario has the largest number, 373, with 181 still living.

Dr. Catherine Hankins, a Montreal public-health epidemiologist who co-ordinated the campaign, said that Ms Lavoie-Roux's real objection was that abstinence as a means of disease prevention was not the primary message of the campaign.

A group called the Movement For Confessional Schools, representing 700 organizations in the province, pressed the minister to reject the ads, said president Maurice Archambault, who is also on the board of the Quebec Catholic Parents Association.

The ads "should tell them what they have to do is act like human beings," said Mr. Archambault, who is also not convinced that AIDS is really a grave threat to heterosexuals.

"Condoms are safe only 97 per cent of the time," he said. "Abstinence is the only way."

"We're speaking to people who've opted not to be abstinent," said Dr. Hankins, during a telephone interview from Montreal. She said the ads do mention various sexually transmitted diseases,

show the consequences and suggest condoms as a method of risk reduction.

In the television ad, a young man and woman are leaning back on a couch about to kiss (they are fully clothed). An announcer says, "They will remember this moment for the rest of their lives . . . unfortunately."

The scene shifts to the waiting room of a clinic for sexually transmitted diseases. The couple are sitting on opposite ends of a bench looking extremely unhappy. The announcer says, "Herpes, gonorrhea, chlamydia, AIDS. Use condoms to reduce your risk. Better a safe than sorry."

To encourage condom use, 15,000 condom wallets were prepared and given out to young people in the province before the campaign was scheduled to begin. A pamphlet included explains how to use condoms, which ones to buy and information on high-risk sex.

Dr. Hankins said people between 15 and 24 are the targets of the ads because studies show that by the age of 18, 67 per cent of young Canadians have had sex. "And the duration of relationships at this age is not very long."

Her surveys found that young people would both laugh at and dismiss ads which preached morality or chastity. "We're meeting them at a level where their values are," said Dr. Hankins.

"This is much more effective than telling them it's quite clear you should abstain from sex before marriage."

The message regarding protection has to be made clear not just because of the threat of AIDS, she said. The highest rate of gonorrhea in Canada is among women between the ages of 15 and 19, she said. And the highest rate among men for the same disease is between the ages of 20 and 24.

"And this age group experiences 75 per cent of sexually transmitted diseases."

Mr. Daudier said opponents and defenders of the ad campaign, who have discussed the possibility of a new campaign more in line with what the minister wants, will be meeting the minister today.

/9317

CSO: 5420/27

SALMONELLA STRAIN REPORTED IN BRITISH COLUMBIA CATTLE

Vancouver THE SUN in English 27 Mar 87 p B3

[Text]

VICTORIA — B.C. cattle are being hit with a particularly infectious strain of salmonella that could also spread to humans who drink unpasteurized milk, a ministry of agriculture spokesman announced Thursday.

The disease could become commonplace in B.C. cattle and cause considerable economic losses because there is no effective method for detecting carriers, Dr. Peter Hewitt said.

Hewitt, chief veterinarian for the ministry, said the "salmonella dublin" could be called the "typhoid fever" of cattle. It causes diarrhea, abortions and death among cattle.

By the end of last year, 19 farms had been infected and three new cases have been discovered so far this year, he said. Most cases are in the Fraser Valley.

The disease can spread to humans because it can locate in the udder and be shed in milk.

"Dairy farmers and others who drink unpasteurized milk could become infected," Hewitt said in a news release.

Deputy agriculture minister Gor-

don MacEachern said Thursday sale of unpasteurized milk is prohibited by law because it is prone to carry various diseases, including the new salmonella strain.

The pasteurization process used for commercial dairy products will kill the salmonella, he said.

If the disease is spread through raw milk to humans it can cause food poisoning.

"People with other infections and under treatment with antibiotics may also be more susceptible," Hewitt said, adding that people whose immune systems have been weakened by irradiation treatments or AIDS are also vulnerable.

There were no cases of the salmonella dublin infection in B.C. until a calf was found infected in 1979.

"The sudden increase of this disease may be due to B.C. farmers importing replacement dairy cattle or calves from Washington state," Hewitt said.

MacEachern says he wants federal inspectors to take a closer look at cattle arriving from the United States but added that the ministry will stop short of banning imports.

/9317

CSO: 5420/29

CANCER INCIDENCE IN NATION AMONG MILL WORKERS REPORTED

National Incidence

Ottawa THE OTTAWA CITIZEN in English 1 Apr 87 p A4

[Text]

One in three Canadians will develop cancer sometime in their lives, and half will die from the disease within five years, says a report released Tuesday.

The report, prepared by the Canadian Cancer Society and Statistics Canada, says cancer, the country's number two killer after heart disease, is on the rise.

That's partly because the country's population has increased and aged in the past few decades. But even when the statistics are adjusted for those changes, the number of cases diagnosed has still gone up by 40 per cent over the past 15 years.

While the incidence of cancer is on the rise, the number of deaths from the disease, not counting lung cancer, has remained steady or fallen slightly.

All the same, the report predicts that this year alone, about 49,200 Canadians will die of some kind of cancer. That's about 135 cancer deaths a day.

There were 46,157 cancer deaths in 1985 and about 47,500 last year.

And in 1987, some 94,700 Canadians will be diagnosed with some form of the disease. The numbers do not include skin cancer, the mildest type which is rarely fatal.

While the mortality rates for most cancer victims have dropped by three to five per cent for men since 1970 and by 10 per cent for women, lung cancer mortality has increased steadily for both

sexes since 1970.

Lung cancer now accounts for nearly a quarter of all cancer deaths and experts say it will account for one in six new cancer cases, as the disease shows up in people who began smoking 15-20 years ago.

Peter Scholefield, executive director of the National Cancer Institute, said the report is the first to provide a true picture of how many Canadians will likely get cancer.

Next to lung cancer, cancer of the prostate is the most common form of the disease in men.

Many female cancer patients are afflicted with breast cancer, but experts say lung cancer may soon overtake breast cancer as the biggest threat to women.

The risk is the same among both sexes for intestinal and rectal cancer.

Cancer patients are considered to be "cured" if they survive beyond five years after diagnosis.

More than 60 per cent of people with breast, uterine, bladder and oral cancer survive for five years after diagnosis.

The survival rate drops to 40 per cent for other common cancers and dips sharply to only 20 per cent for stomach and pancreatic cancers.

The 32-page booklet says nine out of 10 cancers begin in the cells which make up body linings, such as the linings of the respiratory passages or intestines.

British Columbia Paper Mill Workers

Vancouver THE SUN in English 1 Apr 87 p A8

[Article by Alicia Priest]

[Text]

POWELL RIVER — Male pulp and paper workers in B.C. under the age of 65 have a 200 per cent greater chance of dying from prostatic cancer than British Columbians in other occupations, a cancer control agency study shows.

Those same B.C. workers also die from lymphatic tumors at a rate 200 per cent higher than the provincial average, the study said. The agency used statistics on 450,000 B.C. residents who died between 1950 and 1978.

Cancer researcher John Spinelli said those statistics are "definitely worth exploring."

"Something perhaps is there," he said. "We would have to do an actual study of pulp and paper workers and the industry to know definitely. We would have to know how long they've worked in the industry and where and then follow them when they move to another job."

Spinelli said such a detailed study would be expensive and would take up to 20 to 30 years to complete. "Right now, we don't have any plans to go any further on this," he said.

"I'm not saying the study should not be done. It should be. But a lot of industries should be studied also."

Canadian Paper Workers Union Local 76 president Roxanne Matheson said high cancer mortality statistics within the pulp and paper industry are nothing new.

"We've known that, from a personal point of view, for a long time," she said. "We hear all the time that so and so has some form of cancer."

Matheson said cancer will be one of the topics discussed at an upcoming MacMillan Bloedel safety convention.

RESPIRATORY AILMENTS AMONG TORONTO HOMELESS DISCUSSED

Toronto THE GLOBE AND MAIL in English 30 Mar 87 pp A1, A2

[Article by Robert Hoshowsky]

[Text]

Tuberculosis and other respiratory ailments plague many of Toronto's homeless, an inquiry into the effects of homelessness on health has been told.

The inquiry, held at Central Neighborhood House, was a forum for groups and individuals representing Toronto's homeless to speak out on the illnesses that develop from living on the street or in crowded boarding houses. One hundred and twenty cases of TB — half the cases in Ontario — were reported in Toronto's downtown core last year, Fran Scott, the area physician for Toronto's health department, told reporters at the inquiry on Saturday.

"TB is a problem in Toronto," Dr. Scott said.

Since the disease is contagious, close contact among the homeless and dwellers of hostels and boarding houses is creating "a problem with reinfection," said Paul Murphy, a representative from the Christian Resource Centre.

Mr. Murphy said he knows of 50 homeless people who were recently tested for TB. Fewer than 20 came back for the necessary retesting three days later.

"I can think of one instance when it took six weeks to get someone in the hospital" for a respiratory ailment, said Dilin Baker, a nurse associated with the All Saints Church Community Centre. "Once they're out on the streets again, the problem is back in six months."

The nine-member inquiry panel also was told that one of the biggest problems facing Toronto's homeless is high-income couples who buy downtown boarding houses, renovate them, and then evict the low-income tenants. That is the trend in such areas as Cabbagetown and Riverdale, which are undergoing gentrification.

"We have lost about 20,000 affordable (rental) units in the last 10 years," said Toronto Councillor Jack Layton, chairman of the city's board of health.

"The problem of homelessness is being created because there's not enough protection for the current stock of housing," said Michael Shapcott of the Roomers Association.

When tenants are evicted from boarding houses, many have to move into hostels or substandard housing, or end up living on the streets, he said.

Daisy Beacon, a single mother who has lived at the Robertson House hostel for two months, said that children in the hostel get little or no medical attention for illnesses they contract due to the overcrowding.

/9317

CSO: 5420/28

BRIEFS

DISEASE REPORTED IN LAKE MARYUT--An important study by the Institute of National Planning, which was prepared by Dr Ahmad Abd-al-Wahhab Baraniyyah, demonstrated that environmental pollution in Lake Maryut causes an annual loss totaling 20.2 million Egyptian pounds. This represents the value of the annual loss in fish production as a result of the pollution of the lake caused by industrial waste and sewage. The study indicated that these losses will deprive 3.7 million people from consuming protein food commodities, i.e., fish, in addition to the extinction of some species of fish. The pollution in the lake has led to the affliction of several workers with typhoid, paratyphoid, cholera, and dysentery. More dangerous is what is called the biologic accumulation phenomenon which eventually leads to an increase in the concentration level of mercury and chemical material in the fish, which is then transferred to humans, causing dangerous nerve diseases. [Text] [Cairo AL-MUSAWWAR in Arabic 20 Feb 87 p 10] 13286/9365

CSO: 5400/4608

FEDERAL REPUBLIC OF GERMANY

BRIEFS

SOLDIERS WITH AIDS DEFERRED--Conscripts with AIDS will be deferred from military service for 3 years, if they present a certificate to this effect at the time of their medical examination. Medical Corps Major Bernhard Hafner stated that the affected persons must be tested for the disease again. Fifty soldiers in the Bundeswehr have AIDS. Hafner attempted to provide soldiers with purposeful and open explanations at the presentation of a 25-minute documentary film for soldiers entitled "AIDS--The Deadly Plague." [Excerpts] [Bonn DIE WELT in German 3 Apr 87 p 10] /12232

CSO: 5400/2466

GUINEA

MEASLES EPIDEMIC REPORTED

Cases Noted in Kindia

AB241124 Conakry Domestic Service in French 2200 GMT 23 Apr 87

[Excerpts] The health services are currently facing a measles epidemic in Kindia. In fact, the Kindia divisional director of health services, Ibrahima Dabo, has just led an immunization campaign in the subdivision of Molota. Our correspondent, Ousmane Toure, takes stock of the results of the campaign:

[Begin recording] Located some 22 km from the chief town of the administrative division, the Molota Subdivision is a landlocked zone facing serious health problems.

According to Dr Ibrahima Dabo, the measles epidemic prevailing at Molota is due to the fact that no immunization campaign has been carried out here for over 5 years. Among the villages affected by the epidemic are: Molota town, Doubigoure, Simbareya, Mambia, Koundaya, Yambele, Daledi, Goro Maya, Sayonya, and Bagayakore. These are all considered to be the heart of the epidemic. For a full week, the mobile immunization team visited these villages where they immunized 954 children under 5 years of age and discovered 133 cases of measles including 47 at Bagayakore. The team also reported 56 deaths including 34 in the same village of Bakayakore. All the victims are under 5 years of age.

Deaths Reported in Tougue

AB281320 Conakry Domestic Service in French 2200 GMT 27 Apr 87

[Text] Sixteen cases of measles, including three deaths, have been recorded in Tougue, in Lebekere District, Kole Subprefecture, following an outbreak of the epidemic. The minister of Moyenne Guinea, who has been informed about it by the prefectural authorities, has immediately dispatched one of the mobile prevention teams to the locality. Our reporter Souleyman Seni Diallo, who followed the team to Tougue, has sent this report:

[Begin recording] After arriving in Tougue on 19 April, the prevention team went to Kole the following day, accompanied by the prefectural health director, Dr Ibrahim Founouya Diallo. Once there, the team strove to deal with this outbreak of measles by ensuring the protection of all the children up to 4 years of age living in Kole Subprefecture. The protective measures taken concern two communicative diseases--that is measles and tuberculosis. The children, who were already affected, have been treated by Kile medical personnel.

On the same day, 20 April, the general secretary of the decentralized communities, El Hadj Mamadou Diop, went to Kole to follow personally the vaccination exercise being carried out in the subprefecture.

After Kole, the mobile prevention team returned to its base in Labe, thus leaving it to the personnel of the prefectural health directorate to continue the vaccination exercise in the other subprefectures of Tougue.
[End recording]

/9604

CSO: 5400/166

PAPERS GIVE DETAILS OF CAMPAIGN AGAINST AIDS

Campaign Director's Remarks

Hong Kong HONGKONG STANDARD in English 27 Mar 87 p 3

[Text]

THE Government has decided not to promote the use of condoms in its campaign against the deadly AIDS disease, Government Information Service Assistant Director Peter Moss said yesterday.

"We have to alarm the public so that they take an interest, yet we must not antagonise them. We do not want to encourage promiscuity," he said.

The Government Information Service plans to launch the campaign on April 20 with the help of the Medical and Health Department as well as other organisations.

Mr Moss, who is in charge of the \$350,000 campaign, said that while the information packages to be released next month will follow the "scare" programmes that have been undertaken in the US and Britain, Hongkong's approach will be slightly different and will not be as graphically explicit.

Information packages will be aimed not only at making people aware of AIDS, but also at shaking them out of their apathy and complacency, Mr Moss said.

There's no pulling punches when it comes to AIDS and it is very important that people are aware of the dangers AIDS poses, not only to the high-risk groups but to everyone, he said.

AIDS is essentially a sexually-transmitted disease with fatal consequences.

The Government campaign will concentrate on the fact that the risk of AIDS increases with the number of sexual contacts people have.

Mr Moss said AIDS is a pyramid type of disease, and not

simply transmitted from one person to another in a chain sequence.

The chance of getting the disease, he said, increases with each person that one has sexual contact with, since they could have picked up the virus as far back as seven years ago and still not know about it.

Mr Moss said it was not the intention of the Government to condone or condemn behaviour.

It merely wants to provide the facts and let people to adapt their behaviour accordingly, he said.

The Government will probably set up mobile units to travel to key distribution centres, he added.

"We do not want to thrust leaflets at the public. We want to make people conscious of the disease and make them want to find out more about the disease," he said.

Meanwhile, the Medical and Health Department announced yesterday that the telephone number of the AIDS counselling service will be changed from 3-7102553 to 3-7802211 starting April 1.

At the same time, the hours of operation will be extended from 8 am to 8 pm instead of 4 pm daily, from Monday to Friday.

The AIDS counselling service, manned by experienced health personnel, was set up on November 25, 1985, to provide counselling to people in high-risk groups and to those who fear they might have contracted the infection. If necessary, blood tests can be provided.

Callers are not required to give their names. All personal information will be kept confidential.

Up to the end of February this year, the service had received 3,644 calls since its inception.

More on Hotline

Hong Kong SOUTH CHINA MORNING POST in English 16 Apr 87 p 2

[Article by Michelle Innis]

[Text]

TWO 24-hour AIDS hotlines have been set up providing recorded information in both English and Chinese.

According to the Medical and Health Department, public awareness of the fatal disease and demand for more information on AIDS has escalated dramatically during the last three months.

Department deputy director Dr S.H. Lee said yesterday the Government-run AIDS counselling service received about 60 calls a day — 45 more a day than the centre was receiving three months ago.

He also said Government clinics and hospitals had tested 30,000 people for AIDS since screening started in April 1985, and that the figures showed a dramatic increase in the number of people willing to be tested during the last six months.

Callers using the new hotline numbers (5-8330180 in English and 5-724533 in

Cantonese) will no longer have to listen to bilingual tapes.

A Government spokesman said that since the first hotline service was set up in March 1985, 13,561 calls had been received.

Dr Lee said the department expected to release new figures on the number of AIDS victims in Hongkong in mid-May.

The last figures released, for the final quarter of 1986, showed 72 people were carrying the virus.

Dr Lee said the hotline had also extended its service by four hours a day operating from 8 am to 8 pm.

Next week the Government is expected to announce when its hard-hitting AIDS television and poster campaign will begin.

Dr Lee was unable to reveal when the television commercials might be aired but he said a public announcement would be made on April 21.

/9317

CSO: 5450/0125

WARNING TO TAKE PRECAUTIONS AGAINST MALARIA

Hong Kong HONGKONG STANDARD in English 6 Apr 87 p 2

[Text]

WITH the advent of the warmer season, local residents — especially those who travel frequently — are asked to take extra precautions against the risk of malaria.

A spokesman for the Medical and Health Department said there have been a number of imported malaria cases during the past three years — 101 in 1984, 162 in 1985 and 127 last year.

Hongkong is vulnerable to malaria because the territory is a major centre for both tourism and business. There is also a great risk of the malaria parasites being brought into Hongkong by travellers from countries where malaria is endemic.

"In view of the geographical and special conditions of Hongkong, it is practically impossible to prevent the importation of malaria parasite carriers," the spokesman said.

However, he urged travellers to take preventive measures, particularly personal protection, against mosquito bites when they visit those countries where malaria is endemic, including China, India and Pakistan and various Southeast Asian countries.

If bitten by mosquitoes, travellers should be on the alert for malaria symptoms, such as a chill or fever, and should seek early treatment if these appear.

Travellers can obtain more information on malaria from the port health office.

The spokesman said the only effective and practical way in which Hongkong can protect itself against the importation of malaria cases is through an efficient system of surveillance, consisting of case detection, treatment, investigation and remedial action. The department has already established such a system.

The spokesman also urged residents to take preventive measures when visiting rural areas in the New Territories

because malaria is transmitted by anopheline mosquitoes, which are found in certain parts of the New Territories.

People going camping or to picnic areas, and especially those planning to stay overnight, should take appropriate personal protections, like wearing long trousers and long-sleeved shirts or coats and using insect repellants. In addition, they should also use mosquito nets or screens.

"But the best preventive measures would be to stop mosquitoes from breeding," the spokesman said.

Mosquitoes transmitting malaria breed in clear water streams and stagnant water with vegetation.

They are mostly found in irrigation ditches, hill streams, excavation sites and abandoned paddy fields.

"Malaria is a notifiable disease and every case notified will be thoroughly investigated by staff of the department as to the possible source of infection," he said.

Blood samples are taken from patients with clinical symptoms of malaria and all cases are taken to hospital for treatment.

After treatment in hospital, follow-up action by health officials will continue for at least another six months with blood screening at monthly intervals, the spokesman said.

Health education is another essential part of anti-malaria activity by the department, he added.

"This is usually in the form of health talks to villages and schools, distribution of posters and leaflets and sometimes house-to-house visits," the spokesman said.

The department is also mounting localised anti-malaria programmes in some areas of the New Territories to remind residents to take the necessary precautions.

Meanwhile, the Urban Services Department is taking steps to control mosquito breeding in various parts of the territory, including the application of larvicides and insecticides to potential mosquito breeding sites.

/9317

CSO: 5450/0126

INDIA

BRIEFS

RABIES DEATHS--Sixteen persons have died of rabies in the Mango area here during the last six months and it is feared that the number of such deaths will increase. The area has a large number of meat shops, which attract stray dogs. The Mango notified area committee which is the municipal authority for the area, has not rounded up stray dogs for a long time. There is also an acute scarcity of anti-rabies vaccine in the state. [Text] [Calcutta THE TELEGRAPH in English 26 Mar 87 p 2] /13104

CSO: 5450/0123

CUTS IN HEALTH SERVICE FUNDING HAVING BROAD IMPACT

Dublin IRISH INDEPENDENT In English 25 Apr 87 p 3

[Text]

A "TIDAL WAVE of fear and anxiety" over health cutbacks is being generated by Health Minister Rory O'Hanlon, Fine Gael's health spokesman Bernard Allen claimed last night.

And he said the Ministerial style which brought about such fear makes Barry Desmond and John Boland—the two previous holders of the office—look like Florence Nightingale.

Mr. Allen is to press the Minister in the Dail for answers to specific questions about which hospitals face closure because of the cutbacks foreshadowed in Finance Minister Ray MacSharry's Budget.

The situation has begun to worsen rapidly in the past few days as the reality of the cuts dawned on health boards faced with making decisions on hospital closures.

The Eastern Health Board is to implement cuts of more than £7 million—a move which will hit jobs, overtime and all but essential training schemes. The Board says there will be "inevitable effects" in service areas but aims to safeguard patient care while trying to maintain staff morale "in these difficult times".

And the North-Western Health Board ordered Sligo and Letterkenny hospitals to operate fully only on a five-day week basis, as the board reduced services and axed 300 temporary jobs.

Health Minister Mr. O'Hanlon told a delegation from the board of the North Infirmary in Cork — threatened with closure and a loss of 220 jobs — that there was no money left.

Mr. Allen — who is also a member of the North Infirmary Board — said "He said he would listen to the board's submission when it was made, but until then he was not in a position to make any decision".

Mr. Allen accused the Minister of being "less than open" with everybody involved about the measures the Government now proposed in relation to the health services.

"Even Fianna Fail councillors throughout the country are now worried that the cure, as prescribed by the Ministers, will terminate the patient," he said.

Meanwhile chairman of the Psychiatric Nurses' Association, Mr. Brian Kelly, said several people who resigned their jobs after being successful at health board interviews for new posts, now found these positions were "frozen."

When they tried to withdraw their resignations,

their employers refused, saying a reduced allocation meant they had to cut staff levels, said Mr. Kelly.

"The procedures for filling vacancies are totally unworkable," he said. "The Minister will have to secure greater flexibility for the health services if we are to maintain essential services and ensure continuity of care."

Mr. Kelly said there was now "a strong possibility" that staffing levels in wards would reach "dangerously low levels" in the coming months, and he warned that the Government embargo would put both staff and patients at risk.

It also emerged yesterday that emergency ambulance services in the Eastern Health Board area are at risk following budgetary cutbacks.

And the board's chief ambulance officer, Mr. Tom Brady, said that, with holidays looming, they would not be able to provide the present level of service.

He said at least 20 relief ambulance personnel had already been let go and there was no hope of replacing them. Redundancies, he added, were now inevitable.

/9317

CSO: 5440/099

AIDS DEMENTIA, FOUND IN UK, NOW ANTICIPATED HERE

Dublin IRISH INDEPENDENT in English 25 Apr 87 p 3

[Article by Katharine Donnelly]

[Text]

A NEW AIDS-related disease may soon make an appearance in Ireland.

Mr. Jim Walsh, Assistant Chief Nursing Officer at St. Ita's Hospital, Portlaoise, Dublin, said that AIDS dementia, which attacks the central nervous system, has been identified in Britain.

He told the annual conference of the Psychiatric Nurses Association in Athlone yesterday that while no case had been diagnosed in Ireland "there may be one soon."

He said that a lot of people could be admitted to psychiatric hospitals suffering from the AIDS dementia, which caused confusion, disorientation and aggression.

At the moment, most victims of AIDS, which breaks down the body's immune system, have suffered a form of pneumonia.

Mr. Walsh told the delegates that psychiatric nurses particularly those working in the community or with outpatients, were coming across AIDS symptoms, and it was causing them worry and concern.

He told the nurses that they should inform themselves about the disease, and they should use their skills to get involved in AIDS counselling.

He added that the question of whether AIDS should be a notifiable disease — where a case would be notified to the Department of Health — or whether the medical profession could breach confidentiality to inform AIDS victim's spouses, family, or friends, should also be tackled.

But a balance had to be struck between a victim's right to privacy and the public's right to know, Mr. Walsh said.

/9317

CSO: 5440/099

AIDS VICTIMS INCREASING; 'HOT LINE' ESTABLISHED

Dublin IRISH INDEPENDENT in English 11 Apr 87 p 6

[Text] AS the number of Irish AIDS victims continues to rise, a 'hotline' telephone advice service has been set up by volunteer teams.

Two more cases of AIDS have been diagnosed, bringing the total to 18. Already 10 victims have died.

The "hotline" is being provided by AIDS Action Alliance, an umbrella group for nine self-help organisations. Experienced volunteers will answer phones at 01-307888 and provide general information on all aspects of AIDS on Mondays from 7-10.00 p.m. and Saturdays from 3.00 to 6.00.

The service will be expanded in July and new volunteers will be trained from next month.

Social worker Patricia Daly said the service will be directed at drug-users, haemophiliacs, gay and bi-sexual couples.

"We are providing up-to-date information on AIDS to all high-risk groups because not sufficient help is being given if the disease is to be contained," she added.

The groups in the alliance include the Wellwoman Centre and other family planning groups.

Ms Daly emphasised that the service will not be "a counselling one"

but essentially for information. The telephone volunteers are social workers and counsellors.

She stressed that the service would provide "non-judgmental" information and advice about avoiding transmission of the virus.

The current issue of the "Irish Medical Times" reports that two of five haemophiliacs in this country with AIDS have died.

The surviving haemophilic suffers include a child.

So far, over 7,000 Irish people have been tested for AIDS antibodies and 564 have been HIV positive. Twenty-two of these are babies, who contracted the disease through their mothers. But some babies have shown signs of immunity. Several HIV babies have now reverted to normal.

And one mother with HIV antibodies has borne a child without the antibodies, despite having already given birth to other HIV positive children.

Last week Dr. Brendan O'Herlihy, director of community care with the Eastern Health Board, said studies indicated that Ireland would have 60,000 people with AIDS antibodies by 1992.

/13104

CSO: 5440/097

BRIEFS

TESTING OF AIDS DRUG--The initial results of tests on a new anti-AIDS drug by an Irish company have been described as "very encouraging" by the firm's chief executive, writes James Morrissey. Dr Austin Darragh of the Institute of Clinical Pharmacology has told the Irish Independent that the test programme for the drug, Ampligen, in three centres in the United States, could result in a major breakthrough in the treatment of AIDS victims. It is now likely that Ampligen will be given the go ahead for extensive testing on AIDS patients in some 18 institutions. Approval for the test is expected from the U.S. Food and Drug Administration. Dr Darragh describes Ampligen as "the most significant advance in the field." "It is not an eradicated cure. It is aimed at restoring the person to apparently good health," Dr Darragh explains. [Text] Dublin IRISH INDEPENDENT in English 24 Apr 87 p 3] /9317

CSO: 5440/099

KENYA

BRIEFS

CHOLERA IN WEST--Kisumu, 13 May (KNA)--Nyanza provincial medical officer of health (PMOH), Dr Louis Okombo, said that 13 people suspected of suffering from cholera have been hospitalised at the Muhoroni health centre. He, however, assured Wananchi [citizens] in the area that a team of medical experts were in the area to study the situation. Dr Okombo, who was interviewed by KNA, said that during the rainy season the risk of an outbreak was high as some people depended on stagnant water for domestic purposes. He said that the Ministry of Health was chlorinating dams from which people drew water. He advised Wananchi not to drink dirty water. Talking about Bilhazia, the PMOH advised those working in the rice fields to wear gumboots to avoid contacting the disease. He also advised them to go for medical checkups regularly to determine healthy bodies. [Text] [Nairobi KNA in English 1750 GMT 13 May 87 EA] /6662

CSO: 5400/173

PASTEURELLOSIS IMPACT, TREATMENT, PREVENTION

Vientiane PASASON in Lao 4 Oct 87 p 2

[Article by Lot Keo: "Methods for Preventing and Eliminating Pasteurellosis"]

[Excerpt] Pasteurellosis is a very contagious and widespread disease which is found in every country in the world.

In our country this disease has become the primary enemy in animal husbandry. Its elimination is an urgent problem on which our cadres and people must concentrate. They must have a plan. They must simultaneously prevent the disease and care for the animals and their health according to technical principles. Especially in this situation injections are needed before the rainy season and after the wet season rice harvest which means two times per year every year. Therefore our cadres and people must assume these responsibilities and be determined to overcome these difficulties. They must increase the number of injections given to prevent this disease as much as conditions allow.

Only injections of medicine produced in the vaccine laboratory of the LPDR which have a label on the bottle giving the production date and expiration date may be used. Before using, the bottle should be shaken thoroughly, and the needle and hypodermic should be sterilized in boiling water. The needle should be changed after each injection. The medicine left over should not be used on later days. The medicine should be kept in a dry dark place where the temperature is between 4 and 6 degrees [centigrade].

These injections to prevent livestock epidemics should only be given to healthy animals with a normal body temperature (from 38 to 39 degrees for cattle and 39 degrees for buffalo) and only to animals over 6 months old. Injections should definitely not be given to animals infected with pasteurellosis. With infected animals 20 to 40 ml of anti-pasteurellosis serum should be injected immediately. After 10 to 15 days, when it can be seen that the animal is in good health again, then injections of medicine to prevent pasteurellosis should be given. Injections should be given through the skin in the amount of 3 cc per animal for cattle and buffalo. They should be given before the rainy season (March and April), and in 6 months (September and October) another 3 cc per animal should be given; this will avoid an epidemic for the year. Pigs over 3 months should be given 1.5 cc and in 6 months another 1.5 cc.

Injections must be given regularly every year in order to assure results.

3149

CSO: 5400/4344

VIENTIANE HEALTH AUTHORITIES ON MALARIA SUPPRESSION

Vientiane VIENTIANE MAI in Lao 23 May 86 pp 1,4

[Article: "Malaria in Vientiane City Has Been Reduced 4.2 Percent"]

[Text] Recently Dr Bounlai Phommasak, the head of the committee responsible for the work of the malaria suppression station of the public health service of Vientiane City, told reporters of VIENTIANE MAI that: from the beginning of January until the end of April 1986 the cadres and state employees at this station strove to accomplish their duties effectively.

During this period they were able to care for patients using local medicines together with government medicine and also examine them for various kinds of malaria; they discovered 15 people [with malaria] out of 391 examined.

In the area of the two districts, Saithani District and Nasaithong District, when combined with that of Vientiane City, there were 153 people who were treated for various kinds of malaria such as: "falciparum" (plasmodium falciparum) and vivax (plasmodium vivax), which threaten our lives. The cadres proceeded according to the slogan: concentrate on disease prevention as the primary form of care.

Now the cadres and state employees at the malaria suppression station are working with public health officials and the local administrations in all the towns on the outskirts of Vientiane City regularly. They have been able to examine people for malaria sufficiently to establish its incidence, and now they have been able to reduce malaria throughout Vientiane City by 4.2 percent.

8149

CSO:5400/4344

VIENTIANE MALARIA WORK DESCRIBED

Vientiane VIENTIANE MAI in Lao 6 Dec 86 p 1

[Article: "There Are 200,000 People Who Have Taken Anti-malaria Medicine"]

[Text] At the end of January the malaria station of Vientiane City held a meeting to summarize the lessons learned from the operations to suppress malaria and to adopt plans for future operations. The cadres of malaria units from the surrounding districts joined in.

The meeting evaluated the efforts to suppress malaria in 1986. This included the distribution of anti-malaria medicine to the people in parts of the following districts: Saithani District, Nasaithong District, Saisettha District, Sikhottabong District and Hatsaifong District. There were 228,000 people who took the anti-malaria medicine. There were 8,600 people who were given blood tests for malaria, and of these 417 were found to have it. In addition officials of the malaria station expanded the testing points by two in Saithani District, and they expanded the target villages for following up with blood tests for malaria by five. They coordinated their activities with the Institute for Malaria and Parasites of central authority in following the spread of malaria-carrying mosquitos in 48 villages of Chanthabouli District, Sikhottabong District, Saisettha District and Sisattanak District. The malaria station of Vientiane City also reviewed a plan for 1987 aimed at expanding the malaria suppression network to the grassroots more and more and developed a plan to start a short training course for district level cadres in order to eliminate this disease completely in the future.

8149

CSO:5400/4344

BRIEFS

VIENTIANE MALARIA INCIDENCE--In the middle of October officials of the Malaria and Parasite Institute affiliated with the Ministry of Public Health sent medical cadres to work with the public health officials of Saithani District of Vientiane City in carrying out their duties of preventing and suppressing malaria in the area of Hatkiang Canton and Bansang Canton in this district. After working for the short period of only 12 days until the 25th of this month, they were able to examine the people of four villages: Ban Nakung Village, Ban Thongmang Village, Thanathe Village and Ban Voenthen Village. There were 2,437 people who took anti-malaria medicine. Blood samples were taken from 546 people. The results showed that 30.2 percent were infected with malaria. Of these 22.14 percent were infected with malaria of the falciparum type and 8 percent with the vivax type. At present these medical cadres are bringing in samples of these two types of malaria for experimentation and research at laboratories in order to find a way to eliminate malaria completely according to the plan adopted by the Malaria Institute. [Text] [Vientiane KHAOSAN PATHET LAO in Lao 31 Oct 86 pp A4,5] 8149

WHO-AIDED MALARIA WORK--The Malaria and Parasite Institute of the Ministry of Public Health ended the first training session in provincial level malaria statistics on 1 November after the students had studied 3 weeks in Vientiane. There were almost 20 students from 12 provinces and Vientiane City who took part. The World Health Organization provided assistance. The course was divided into two parts: theory and practice. It included 15 subjects, such as compiling data and producing statistics from it, planning programs, keeping data on the number of people who have been sick with malaria and the number who have died from it at the village level and the canton level as well as summarizing and evaluating this data etc. They received an evaluation of 100 percent for their training in theory and 80 percent for their training in practice. The purpose of the course was to raise the level of statistical reporting for malaria so that it was effective and uniform throughout the country. [Text] [Vientiane KHAOSAN PATHET LAO in Lao 4 Nov 86 p A4] 8149

LUANG PRABANG MEDICAL WORK--At present the mobile medical units of Luang Prabang Province have all mastered their specialty and have gone down to the production grassroots to provide continuous health care for the people. This year they have conducted operations to prevent disease and suppress epidemics in the villages of the people in various districts on 16 occasions. They have organized projects to give injections to the people to prevent disease in two

towns: Pak-ou District and Nan District. They have provided care and injections to prevent tetanus, whooping cough, diphtheria, polio, smallpox and other diseases for many thousands of workers with the aim of keeping them in good health thus allowing them to perform their historic duty in defending and developing our nation so that it is wealthy and advances without end. [Text]
[Vientiane PASASON in Lao 29 Dec 86 p 1] 8149

CSO: 5400/4344

MISSION ANTS INVADE KAKATA CITY

Monrovia NEW LIBERIAN in English 3 Mar 87 pp 1, 6

[Article by Joseph Teh]

[Text]

After beating an honourable retreat from Buchanan, Grand Bassa County, the now notorious Mission Ants are once more on the rampage in a frantic bid to capture Kakata, the county seat of Margibi County.

Residents are said to be at the mercy of these tiny creeping creatures that are decisively and gallantly trooping into homes, business centers and offices as well as many other quarters of the city.

Human efforts to combat the increasingly intruding enemies marching on in garrison do not appear to be paying off unless relevant scientific materials as insecticides are

provided to help contain the daring ants.

The ants have raised such an alarm that Kakata City Mayor Ernest Palmer has not found a comfortable lead in his wrestling battle with the ants. Mayor Palmer who says he and his people have been fighting the situation for the past three years, admitted that the annoying insects whose bite has a burning effect, are gaining ground. He is now making an appeal to government, humanitarian organizations and foreign friends to help provide insecticides that will bring the ants under control.

Mayor Palmer, in an interview with journalists over weekend,

attributed the ant invasion to the stock pile of dirt built into pyramids at many dump sites.

Mr. Palmer said the Liberian Marketing Association and the Federation of Transport

Union are the major sources of dirt piling up at dump sites. In the absence of equipment to remove these dirt, it becomes difficult to control the ants, he noted.

Mayor Palmer then accused these two bu-

siness organizations of violating city ordinances by "persistently dumping dirt at dump sites without providing means to remove the dirt."

He said it was difficult to punish these two organizations because of their affiliations in the country. He said if city governments are not given the free hand to function independently, ants may not only invade other cities, city governments will cease to exist.

/9317

CSO: 5400/170

LIBERIA

BRIEFS

MEASLES OUTBREAK IN KONOYEA--A deadly disease, measles, has affected several kids in James Babe Town in Konoyea Clan, Salala District, about two hours walking distance from Fielah, on the Totota highway. Our reporter who visited the spot this week was told upon arrival that one child had already been killed by the disease and many others were very serious and needed immediate medical attention. Sometime ago, it was reported that the epidemic killed many other children in Fielah itself. Meanwhile, relatives of the affected children have appealed to the medical director for Bong County, Dr Walter T. Gwenigale, to dispatch a team of health personnel there in order to help save their children "so they can't die from us young." [Text] [Monrovia DAILY OBSERVER in English 17 Mar 87 p 8] /9317

CSO: 5400/170

BRIEFS

CHOLERA IN KEDAH--More cases of cholera were reported in Kedah State today, including a case which was reported in Baling District early last month. State Medical and Health Services Director, Dr Peter Low, said one case was detected in Yan District, while another two cases were detected in Sungai Petani and Kuala Muda Districts. The number of cases reported in Kedah State since early April stands at 32 people affected; 22 others are carriers. [Summary] [Kuala Lumpur Domestic Service in Malay 1230 GMT 10 May 87] /9604

MEASLES IN SABAH--Kota Kinabalu, Sabah, 29 Apr (OANA-BERNAMA)--The outbreak of measles in the district surrounding this capital of the east Malaysian State of Sabah, has claimed an estimated 95 lives in the 2 months since it was discovered. Most of the victims are believed to be children of illegal Filipino immigrants. [sentence as received] Sabah Medical Services Director Dr Mechiel Chan told a news conference here Wednesday [29 April] 49 deaths were reported in March and the rest this month. [Excerpt] [Kuala Lumpur BERNAMA in English 1021 GMT 29 Apr 87] /9604

CSO: 5400/4359

HEALTH OFFICIALS PREDICT SUCCESS OF PEMBA VACCINATION CAMPAIGN

Maputo NOTICIAS in Portuguese 24 Mar 87 p 3

[Text] Initial contacts with the population groups covered by the accelerated vaccination campaign in the city of Pemba--pregnant women and children under two--has been termed positive. The campaign officially began on 12 March. Local health authorities told our reporters that so far, the response in the first two neighborhoods--Alto Gingone and Muchara--indicates that the 80-percent coverage goal will be met and, probably, exceeded.

Antonio Amisse, an officer of the provincial health department in the community, reported that 451 children under 1 year old, and from 12 to 23 months [as published], plus 77 pregnant women were vaccinated just in the first 3 days, which means about 78 percent.

According to the official, work in these Pemba neighborhoods is being made somewhat easier by the mobilization efforts made every day at the health units. This means that a sizable portion of the target population is already familiar with the campaign and many had already received their doses.

Another noteworthy aspect, according to Amisse, is the involvement of neighborhood Party members, who have been following the progress of the process since the very beginning and encouraging residents to take part in the accelerated vaccination campaign. Hour after hour, from 8:00 until about 15:00, people stream into the vaccination sites set up by the health department and the neighborhood secretaries.

The accelerated program in Pemba is scheduled to continue until the end of the month. The results are expected to be made public on 7 April. The neighborhoods of Eduardo Mondlane, Cariaco, Ingonane, Paquitequete, and Mize--which have a total population of 67,000--will be covered in succession.

The total number of pregnant women is estimated at 3,400, of which 2,680 will probably be reached by the campaign. There are 3,400 children under 1 year old and 2,234 from 12 to 23 months of age. It is anticipated that 2,144 and 1,872 of these, respectively, will be vaccinated. These data were obtained from the recent population census but are not completely firm because migration is fairly high at this point in the crop year.

Neither the dates nor the total number of districts to be covered in the second phase of the campaign has been determined. However, Amisse said that as is the case in the city of Pemba, the work in the second phase will be limited to the major population centers.

12830/12379

CSO: 5400/135

NAMPULA VACCINATION CAMPAIGN LAUNCHED

Maputo NOTICIAS in Portuguese 25 Feb 87 p 1

[Text] Lucas Chomera Jeremias, provincial director of health in Nampula, declared Tuesday that "207 of every 1000 children born alive each year in this province die before their first birthday from diseases related to the pregnancy, delivery, or puerperium phases experienced by their mothers, or from contagious diseases or parasites." He added that according to the 1980 census, the infant mortality rate in Mozambique is 159 per thousand live births. "Nampula is one of the provinces where infant mortality is high."

The official was speaking at the Mutala administrative station on the outskirts of the provincial capital during the official ceremony held to mark the start of the Accelerated Vaccination Program in Nampula. The campaign is intended to increase vaccination coverage in the city to 80 percent from its present level of 40 percent. The program was symbolically opened by Gaspar Dzimba, the provincial governor, who administered the first anti-polio inoculation to a selected child.

Also during his address, the director of health for the province said that the high infant mortality rate observed in Mozambique and in many developing nations is a characteristic of the state of health of the inhabitants of those countries, as well as "their low socioeconomic level."

"Vaccination is one of the powerful and effective low-cost weapons available to modern medicine today," the director stated. He listed six diseases that can be prevented or at least ameliorated through vaccination; measles, tetanus, whooping cough, diphtheria, polio, and tuberculosis.

"Vaccination," said Jeremias "costs \$5.00 per child. Even so, in 1984, less than 20 percent of the children in the developing world had been immunized against all or at least the majority of these diseases." He also pointed out that "these illnesses, which can be prevented at low cost through vaccination, kill 5 million small children each year worldwide and leave others physically or mentally handicapped."

Jeremias also noted that more than 263,000 children from birth to 11 months were vaccinated last year in Nampula Province under the Accelerated Vaccination Program, against tuberculosis, measles, tetanus, diphtheria, and whooping cough.

The speakers emphasized the necessity to ensure that the community is sufficiently mobilized and motivated to bring their children under two years of age--the group which, along with pregnant women, is the primary target of the program--to the health units and clinics. The response to previous programs has been disappointing.

"Under the Accelerated Vaccination Program we are trying to get people to actually use the vaccination services--both the stationary and mobile teams," said the provincial director. (The latter are used only in zones where there are no health units or where the people live extremely far away from them.) Earlier, Almeida Saraiva, director of the Center for Preventive Medicine and Medical Examinations of Nampula, had said that in order to make this campaign successful his institution would launch a door-to-door mobilization effort, coordinated with the city's schools and involving the students in making posters, writing skits, and taking other initiatives to help convince the community to participate in the Accelerated Vaccination Program.

"We have already experimented with the Carrupeja elementary school with good results; now we must keep going and involve more schools in this city," Almeida Saraiva said.

Governor Gaspar Dzimba, in his speech, also emphasized the need for Party officials at various levels to back up this program with specific action. "The children of the Party Secretary and of the OMM or OJM Secretaries must set an example by being vaccinated on schedule," the governor said, arguing that health is a basic condition for increasing farm production and output in other areas.

Nampula Province has a population of 2,790,231, of which 107,188 are children under one year of age. In order for this program to be successful in Nampula, it will have to be extended to the cities of Nacala, Angoche, and Ilha de Mocambique.

The campaign is receiving material support from UNICEF, which has furnished the means for carrying out the planned activities.

12830/12379
CSO: 5400/135

NEPAL

BRIEFS

PRIME MINISTER MEETS JAPANESE JAYCEES--Katmandu, 26 Apr (KYODO)--The visiting delegation of Japan Jaycees met Nepalese Prime Minister Marich Man Singh Shrestha at his office Sunday afternoon, Nepalese officials said. Led by Masahiro Murakami, the 23-member delegation arrived Thursday to help Nepal Jaycees launch a pilot program to fight Japanese encephalitis in Nepal. The delegation which includes doctors and public health experts is also scheduled to visit Bangladesh where Japan Jaycees is supporting the government's "Aqua-aid" movement, an oral rehydration program to combat diarrhea among children. [Text] [Tokyo KYODO in English 1008 GMT 26 Apr 87] /9604

CSO: 5400/4713

NIGERIA

BRIEFS

YELLOW FEVER CONFIRMED IN OYO STATE--It has been officially confirmed that 116 people have died in Oyo State following the outbreak of yellow fever last week. The commissioner for health, Dr Olu Alabi, told newsmen in Ibadan that the figure is not yet known of the number of those who might have died in traditional hospitals. [passage indistinct] He said as a first step to contain the epidemic, an immunization campaign had begun in 11 local government areas. The commissioner appealed to the people to go for immunization instead of relying on local herbs. Representatives of the WHO are in the state to help [words indistinct]. [Text] [Lagos Domestic Service in English 2100 GMT 29 Apr 87] /9604

MEASLE, MENINGITIS DEATHS IN KANO--In Kano State, 59 children have died of measles since the beginning of this year, while about 400 others are still on admission at the infectious diseases hospital. Cases of cerebrospinal meningitis have reduced from 42 to 29 in the last 2 weeks. The medical officer in charge of the hospital, Dr Onyenbudjor, told the state committee on meningitis that the hospital was congested and did not have enough doctors. He said because of lack of accommodations, three or four children made use of one bed and there was the plan to move some patients to temporary sheds as an interim measure to ease congestion. Dr Onyenbudjor told the committee that most of the dead were children, whose cases were not reported in good time. Meanwhile, 176 people have so far died of meningitis in some local government areas of the state since last November. [Text] [Kaduna Domestic Service in English 1700 GMT 10 Apr 87 AB] /9274

CSO: 5400/152

STATISTICS ON AIDS CASES, DEATHS REPORTED

23 Deaths By January

Oslo ARBEIDERBLADET in Norwegian 22 Jan 87 p 2

[Article by Stein Slettback Wangen: "23 AIDS Deaths In Norway To Date"; first paragraph is introduction]

[Text] Namsos--As of 20 January this year, 36 Norwegians have been stricken with AIDS. Of these 23 have died. At the same time, 339 Norwegians have been recorded by the health authorities as being HIV-positive--carriers of the AIDS virus. But the true figure is much higher. Oyvind Nilsen, a consultant at the National Institute of Public Health, estimates the figure of HIV-positive individuals at between 3,000 and 4,000, writes the NAMDAL ARBEIDERBLAD.

The National Institute of Public Health (SIFF) prepared the report about recorded cases of AIDS and those with HIV.

Only Men

So far in this country only men have developed AIDS. The SIFF report says that 29 out of the 36 cases are homosexuals/bisexuals.

One Norwegian was accidentally infected with AIDS by a blood transfusion. Two of the AIDS cases are drug users, while three are hemophiliacs. The most recent case is a man who was infected through heterosexual contact with a prostitute in the Caribbean.

"Within a 5- to 10-year period, 30 percent of those with the AIDS virus will probably develop the deadly disease," Oyvind Nilsen, a consultant at SIFF, told the NAMDAL ARBEIDERBLAD.

Affects Many

SIFF estimates that today between 3,000 and 4,000 Norwegians are HIV-positive, carriers of the AIDS virus since they have developed antibodies.

The AIDS report says that as of 10 January this year regional laboratories in Norway have detected antibodies in approximately 480 persons. Of these 339

were reported to SIFF via the physicians' system for infectious diseases. Notable is the fact that the health authorities do not know about most of the HIV-positive cases.

Four Children

According to the AIDS report, four children under the age of 14 have tested HIV-positive. Nevertheless it is people in their 20's who most frequently develop the antibodies. Of the 339 cases recorded by SIFF, 159 are between 20 and 29 years old. 116 are in their 30's.

Drug users comprise 49.3 percent of the total number of HIV-positive cases. 169 of the 339 recorded cases are drug users. In addition, 129 homosexual/bisexual men are carriers of the AIDS virus.

Government Establishes Information Office

Oslo AFTENPOSTEN in Norwegian 15 Apr 87 p 10

[Article: "Own Office For AIDS Information"]

[Text] The National Institute of Public Health is getting its own information office for HIV/AIDS from which the press and the public can receive the latest news on the subject. The information office will have three employees and at the same time the Directorate of Public Health will get its own information employee for the same purpose. The office will prepare and have oversight over informational material. This is standard Ministry of Health and Social Affairs practice.

12789

CSO: 5400/2462

STATUS, PROSPECTS OF DISEASE SURVEILLANCE

Beijing ZHONGHUA LIUXINGBINGXUE ZAZHI [CHINESE JOURNAL OF EPIDEMIOLOGY] in Chinese Vol 7 No 5, 10 Oct 86 pp 300-302

[Text] The 1968 World Health Conference of the WHO defines disease surveillance as the continuous and detailed observation and monitoring of the distribution and migration of infectious diseases, and the relevant factors involved, so that the control of such diseases can be more effective and complete.

The WHO places very important emphasis on the surveillance of diseases. In addition to supporting various countries to establish disease-surveillance centers, relevant information on the spread of diseases in various locales is also collected and stored within a group of establishments at the headquarters. This information is then analyzed, abstracted, published in the "Weekly Report on Epidemiology," and distributed to various countries. Many countries have now established organizations to work on disease surveillance. In the United States, the number of diseases under surveillance has increased to 48, and the Disease Control Center has been publishing the "Weekly Report on the Rate of Infection and Mortality."

In 1955, China established a system of reporting on 18 legally defined infectious diseases. The number increased to 25 in 1956. This was, in fact, part of what constitutes disease surveillance. Within the last few years, some scientific research centers and epidemic prevention centers have already started the surveillance on a number of diseases, such as infectious meningitis, hemorrhagic fever, malaria, hepatitis, diarrhea, hypertension, and cancer. In 1980, under the direction of the minister of epidemiology of the Ministry of Public Health and the Chinese Academy of Epidemiology, a national network of surveillance was gradually established spearheaded by the infectious disease research centers. This marks the beginning at the surveillance sites of a nationwide effort to continuously and in a detailed manner, provide comprehensive disease surveillance. Disease surveillance is now becoming systemic and standardized. Early in 1986, the network of disease surveillance comprises 48 cities and village surveillance sites in 21 provinces (cities and autonomous regions). The number of people under surveillance is 8 million. In the 5 years of comprehensive disease-surveillance work, the following observations are felt to be of particular importance to disease surveillance.

1. Accumulate more accurate basic public health information, morbidity, and mortality rates: Because the surveillance sites have already established a set of effective reporting procedures, the quality of personnel has also been raised, and this guarantees the reliability of the figures. It is not possible even in developed industrialized countries to have absolutely accurate morbidity rates, therefore countries are interested in the tendency of the spread of infectious diseases. If the morbidity and mortality rates of the region containing 1 percent of China's population are accurately analyzed, then goals of reflecting the tendency of the spread of common infectious diseases and the effectiveness of their control will have been achieved. These diseases include: measles, dysentery, hepatitis, infectious meningitis, diphtheria, whooping cough, scarlet fever, influenza, typhoid, and poliomyelitis. In analyzing the morbidity and mortality rates of the various legally defined infectious diseases in China, three kinds of curves should be plotted, one on reports of infectious diseases in the nation, one reported after missing information has been assessed and the situation estimated, and one reported after missing information has been assessed and the situation estimated by the disease-surveillance network. In estimating the tendency of the spread of infectious diseases, the last curve is more accurate.

2. In comprehensively surveying incidences of infectious diseases, the level of epidemic health has been improved: The disease-surveillance sites have gradually become model sites for epidemic-prevention work. The accumulated information will also become important data on which epidemic-prevention policies and procedures may be based. It is important to understand the effects and benefits after such policies and strategies that are implemented. Only after disease surveillance that is continuous and analyzed in detail for the pattern of distribution and tendency of spread of individual disease will we be able to obtain complete and accurate information to ascertain whether the strategies have been correct, and the policies have been effective and comprehensive. Only by continuously improving the policies and strategies will the level of epidemic prevention continue to increase.

3. The disease-surveillance site is the base to train and educate epidemic-prevention workers, and an ideal location for on-site scientific research and class instruction for medical school students: In the last 5 years, many cadre workers who are familiar with disease surveillance have been trained. In the course of disease-surveillance work, they have elevated their understanding of the treatment of the gathered information, and many reports on disease surveillance have been published in journals at various levels. Also, many topics on epidemiological disease surveillance research or other specialized medical science research topic can be done at these well-equipped surveillance sites.

With a few years of experience in comprehensive disease surveillance, we feel that China's comprehensive disease surveillance can be divided into three states:

State 1. Establish surveillance sites, and perfect the reporting system of legally defined infectious diseases and the collection of basic health statistics: Surveillance sites should be set up for a population base of 100,000

to 200,000. If there are too few people, then some diseases with very low morbidity rates will be difficult to analyze. If there are too many people, then the workload will be too heavy and quality will be affected. Also, the reporting system must be perfected and different levels of epidemic-prevention and reporting personnel must be trained. Standardized recording forms devised by the national disease surveillance network must be used, including the four cards (birth report card, death report card, legally defined infectious disease report card, and prevention inoculation card), the six booklets (birth record booklet, death record booklet, legally defined disease report booklet, epidemic report booklet, preventive inoculation report booklet, and abnormal reaction to inoculation report booklet), and several yearend report forms. The majority of the content of these cards and booklets had already been put into practice at various levels epidemic prevention centers. The surveillance sites can systematize and standardize the system by revising, and supplementing the existing content.

Stage 2. Gradually expanding some specialized research topics of disease surveillance: For example, between October and November of each year, the surveillance sites assess missing information on disease surveillance through a standardized sampling procedure to obtain such information from the residents and hospitals. This will help in ascertaining the rate of residential and hospital underreporting in order to estimate the morbidity rate. Another topic is to survey the effects of planned epidemic prevention of diseases included in the epidemic prevention institute promoted by the WHO such as malaria, diphtheria, poliomyelitis, whooping cough, and tetanus. This includes standardized periodic assessment of the level of antibodies in children and other residents, and the analysis of the relationship between the level of antibodies and the morbidity rate. The national disease surveillance network has devised eight special surveillance formats. These include the observation of the factors contributing to the annihilation of malaria, poliomyelitis, and diphtheria, the anticipatory observation of chronic viral hepatitis, and cirrhosis of the liver, underreporting of death, average life expectancy, the study of external injuries and the relationship with accidental death, the study of diarrhea antigen, the study of the cost of planned epidemic prevention and its benefits. The topics were studied at different surveillance sites according to their unique situation. A number of new topics have been added this year.

Stage 3. This stage of disease surveillance is aimed at the development of comprehensive surveillance: In addition to legally defined infectious diseases, the scope of surveillance will include infectious diseases not legally defined and parasitic diseases; chronic diseases, such as cancer, hypertension, coronary heart disease, apoplexia meningeae; children's diseases, such as malnutrition, anemia, birth defects, and pneumonia. Also included can be health surveillance, food health, and environmental health, as well as some topics requested by the WHO or United Nations Children's Fund. These are the long-range goals of disease surveillance. Not every disease-surveillance site is required to pursue these many projects. According to the current situation in China, in the foreseeable future, disease surveillance will still center around infectious disease surveillance. Our plans for the immediate future include the gradual inclusion of specific disease surveillance of diarrhea,

meningitis, hepatitis, malaria, coronary heart diseases, cancer, and pneumonia in the national network of disease surveillance.

In 1986, the original disease-surveillance system was reorganized, and the goal of disease surveillance was emphasized to be the elevation of the quality of epidemic-prevention health care, and to make more comprehensive the control of infectious diseases. The "National Disease Surveillance Cooperative" was established in 1980 based on the principle of voluntary participation. In the last few years, many surveillance sites of the cooperative had made significant contributions. However, this form of organization as a cooperative can no longer adapt to the requirements of long-term and in-depth development of the task. There is a need to establish a well-organized surveillance network that encompasses and represents proportionately all the provinces, cities, and autonomous regions in the entire nation. Following the directives of the Chinese Academy of Preventive Medical Sciences, the Institute of Epidemiology has conducted evaluation and reorganization of the surveillance sites. Each province is divided into one to two city surveillance sites and one to two village surveillance sites. The population under surveillance constitutes 1 percent of the entire province. As to the eight provinces that have not yet established surveillance sites, there have been negotiations on the establishment of such sites. The final goal is to establish a national disease surveillance network led by the Chinese Academy of Preventive Medical Sciences. The population under surveillance will reach 10 million. In addition to participating in the nationwide disease-surveillance network, provinces can develop disease-surveillance sites at the provincial level, but with attention paid to controlling the number of sites and the speed of their development.

Disease-surveillance sites will gradually become the model sites for epidemic-prevention health care. At these model sites, the leadership will have in-depth knowledge of how to elevate the quality of epidemic-prevention health care through surveillance work. The quality of epidemic-prevention personnel will also have improved greatly and will have become a complete network of disease reporting. Basic health care statistics, legally defined infectious disease reporting, and other relevant data will be very accurate. Morbidity and mortality rates will drop to the lowest levels in the nation. Life expectancy of residents will exceed the average values of corresponding areas. Other areas of epidemic-prevention health care work will have great improvements as well.

The Chinese Academy of Preventive Medical Sciences has already listed disease surveillance as one of its most important tasks. In order for reports, analyses, and predictions regarding infectious disease in the nation to quickly cascade down to the basic-level units, and in order that experience in disease-surveillance work can be shared, the Chinese Academy of Preventive Medical Sciences has started in January 1986 the publication "Disease Surveillance" (a monthly) and organized the compilation of a "Handbook on Disease Surveillance."

Disease surveillance is not only a means to elevate the quality of epidemic-prevention health care, but also an integral part in the effective control of

diseases. In the last few years, because the leadership at various levels of health care organizations and epidemic-prevention centers has understood the above rationale, and actively supported this work, many provinces and cities have already included disease surveillance in their list for evaluation and comparison, and hence enhanced the development of disease surveillance in the nation. Although the term disease surveillance is imported from overseas, China already possesses a complete epidemic-prevention health care system and infectious disease reporting network. The collection of data is relatively easy, and so we believe that in the near future work in the disease-surveillance area will reach international standards, and contribute to the four modernizations of China.

12996/9365

CSO: 5400/4106

EPIDEMIOLOGICAL STUDIES OF TRICHINELLA SPIRALIS TESTED

Beijing ZHONGHUA LIUXINGBINGXUE ZAZHI [CHINESE JOURNAL OF EPIDEMIOLOGY] in Chinese Vol 7 No 5, 10 Oct 86 p 282

[Text] Zheng County in Henan Province is a trichinella-infected area. The infection rate in human beings and pigs by trichinella is high. This paper reports on the results in an epidemiological study on healthy human beings and pigs in Zheng County with the ELISA, SpA-ELISA, and biopsy tests. The ELISA and SpA-ELISA are tests that use normal testing procedures to test for soluble proteinous antigens from the larvae. ELISA is applied to humans and SpA-ELISA is applied to test for special serum antigens in pigs. Muscle biopsies for microscopic examination and muscle digestion tests are performed on some of the healthy subjects and all pigs in the experiment. The results are compared to both the ELISA and SpA-ELISA tests.

Eleven people tested have positive muscle biopsy results, showing two to six trichinella per gram of muscle. The average value of ELISA OD₄₉₂ is 0.76, markedly higher than the group of healthy blood donors (0.30). There are eight ELISA-positive cases, with a positivity rate of 72.72 percent, and also markedly higher than the latter group (two positive cases, with positivity rate of 6.67 percent, 2/30).

Without exception, the 297 cases of healthy subjects tested in Zheng County do not have the habit of ingesting raw pork or positive trichinella clinical manifestations. In the 297 cases, there are 59 ELISA positive cases, with a positivity rate of 19.87 percent. The positive titration range is 1:192 to 1:3,072. There are 172 male subjects and 125 female subjects. There are no significant differences between the positivity rates of male and female (20.3 and 19.2 percent). The number of children (4-10), youths (11-20), adults (21-50), and seniors (more than 50) are, respectively, 6, 133, 142, and 16. The number of positive cases are, respectively, 0, 18, 35, and 6. The positivity rates are 0, 13.53, 24.65, and 37.5 percent, respectively. The positivity rates are markedly higher in the adult and senior groups compared to the children and youth groups. The number of positive cases among butchers, peasants, cooks, laborers, and students are 37, 60, 45, 53, and 103, respectively. The positivity rates are 37.84, 25.00, 24.44, 16.98, and 9.80 percent. The positivity rates of butchers, peasants, and cooks are markedly higher than those of laborers and students.

In studying the biopsies of 108 domestic pigs, there are 31 positive cases. The positivity rate is 28.7 percent, 32 cases have SpA-ELISA positive results. The positivity rate is 29.63 percent, which is not significantly different from the biopsy positivity rate. In the 31 cases of positive results in the biopsies, 29 cases are SpA-ELISA positive, which is 93.55 percent of the total. In the 77 cases of negative results in biopsies, 74 cases are SpA-ELISA positive, which is 96.1 percent of the total. The results are basically the same. The count of larvae in biopsies (X) and the OD₄₉₂ value of SpA-ELISA are positively correlated, with a correlation coefficient $r = 0.5622$, and a linear regression equation of $OD_{492} = 0.694 + 0.00712X$. In mildly infected pigs (1-10 larvae/gram), the SpA-ELISA positivity rate is 71.43 percent (5/7), and in moderately infected (11-100 larvae/gram) and heavily infected (101 or more larvae/gram) pigs, the SpA-ELISA positivity rate are both 100 percent (14/14, 10/10). Therefore, this procedure is suitable to use on sanitation testing on domestic pigs. This procedure is useful in the early identification and treatment of infected pigs, so that infected pork can be kept from entering the market. This will in turn lower the rate of infection in human beings.

12996/9365

CS0: 5400/4106

LONG-TERM PRESERVATION OF VIBRIO CHOLERAE STUDIED

Beijing WEISHENGWUXUE TONGBAO [MICROBIOLOGY] in Chinese Vol 13 No 4, Aug 86
pp 174-177

[Text] There are many methods to preserve bacteria.^{1,2} From the viewpoint of temperature preservation, there is deep freezing (dry-freezing), medium-to low-temperature preservation (refrigeration), and room-temperature preservation (about 26°C). There are not many reports on the methods of preservation of vibrio cholerae; the general practice is refrigeration. Reports on the survival temperatures of vibrio cholerae by various authorities are quite different. There does not seem to be any in-depth research report on the topic either. Our observations show that the optimal survival temperature for vibrio cholerae is at about 26°C, and if kept in 0.01M pH 8.0 PBS diluted alkaline peptone water and kept at room temperatures (22 to 28°C), they can be preserved for 2 to 3 years or more. The following report gives the results of the research.

Materials and Method

I. Materials

1. Biotypes: Obtained from units such as the Military Academy of Science.
2. Media: Semisolid bacteria preservation media, prepared according to directions, and filled to 2 cm per tube.
3. Dilution agent: Sterile pH 8.0, 0.01M phosphoric salt buffer solution (PBS).
4. Media for analysis and separation: A double-sugar agar in petri dish, purchased from the Shanghai City Public Health Epidemiology Section.

II. Method

The identified classic and El Tor biotypes of vibrio cholerae are inoculated in the semisolid media, and incubated in 37°C for 15 to 18 hours. Into each tube, 0.5 to 1 cm in depth of liquid paraffin is added, and the tubes are placed in a 4 to 8°C refrigerator, 24 to 28°C and 35 to 37°C incubators. These cultures are then preserved for various lengths of time, and then transferred to broth media and semisolid media for cultivation. Survival

rate, morphology, colony characteristics, and serological agglutination studies are done.

PBS is used as the preservation reagent and the results at different temperatures are studied as well. The two identified biotypes of vibrio cholerae are inoculated in alkaline peptone water, and placed at 37°C for 15 to 18 hours of incubation. Counts of surviving bacteria are obtained. Then pH 8.0, 0.01M PBS is used to dilute to 10^{-6} PBS bacterial suspension, and it is separated into sterilized containers. These containers are then placed in the following four temperature ranges for preservation: freezing, 4 to 8°C, 24 to 28°C, and 35 to 37°C. After various lengths of time of preservation, the cultures are then transferred to the double-sugar agar media and an ordinary agar media for cultivation. Survival rate, morphology, colony characteristics, and serological agglutination studies are done.

Results

1. Survival Rate of Vibrio Cholerae in Semisolid Media at Different Temperatures of Preservation

In semisolid media, the survival rate of El Tor and classic vibrio cholerae preserved at 4 to 8°C for 1 month are 8/10 and 5/15, respectively. At 3 months all preserved cultures died out. At 24 to 28°C for 3 months, the survival rates are 51/51 and 8/8, and for 14 months, the rates are 41/51 and 3/8. At 35 to 37°C, the El Tor strain was kept until 24 months with 5/10 surviving. The classic strain was kept until 6 months, with 1/9 surviving (Table 1).

Table 1. Survival Rate of Vibrio Cholerae for Various Lengths of Time and at Different Temperatures

Preservation temperatures (°C)	Strain	Survival rate for lengths of time (in months)						
		1	3	6	10	14	18	24
4-8	El Tor	8/10	0/10	0/10	0	0	0	0
	classic	5/5	0/5	0/10	0	0	0	0
24-28	El Tor	51/51	51/51	45/51	45/47	41/51	0/10	0
	classic	8/8	8/8	4/8	4/8	3/8	0/8	0
35-37	El Tor	48/48	32/48	34/48	22/48	5/10	5/10	5/10
	classic	9/9	3/9	1/9	0/9	0/9	0/9	0

Note: denominator = number of experimental colonies
 nominator = number of surviving colonies

2. Survival Rate of *Vibrio Cholerae* in Semisolid Media at Different Temperatures of Preservation for 10 Months (Table 2)

Results in Table 2 show that after keeping both strains of *vibrio cholerae* at 28°C for 10 months, and then transferring the cultures to temperatures of 28°C and 37°C, the survival rates are 45/51 and 4/8, respectively. When kept for 10 months at 37°C, the strains have survival rates of 41/51 and 4/8 when incubated further at 28°C and 37°C, respectively (Table 2).

Table 2. Number of Surviving Colonies of Transferred *Vibrio Cholerae* After 10 Months of Cultivation in Semisolid Media at Various Temperatures

Preservation temperatures (°C)	Strain	Survival rate at various temperatures of transferred cultures	
		28°C	37°C
28°C	El Tor classic	45/51 4/8	45/51 4/8
37°C	El Tor classic	41/51 4/8	41/51 4/8

3. The Following Are Results of the Characteristics of F1 Generation Cultures When the Strains Are Kept in Semisolid Media at Various Temperature and at Different Lengths of Time

When kept at 4, 28, and 37°C for a specified period of time, the morphology of the surviving F1 generation culture can be studied when stained with Gram's stain. We may also culture the bacteria in alkaline peptone water and agar petri dish to observe their colony characteristics. Antibodies can be used to study their agglutinating properties with blood agglutination tests. The results show that both biotypes of *vibrio cholerae* show normal or basically normal properties in morphology, colony characteristics, and serological antibody agglutination, no matter whether the bacteria were kept at 4 to 8°C, 24 to 28°C, or 35 to 37°C.

4. Survival Rate in pH 8.0, 0.01M PBS at Various Temperatures and Different Lengths of Time

According to Table 4 [as published], the bacteria all died when kept at freezing and 4 to 8°C for 15 days. When kept at 24 to 28°C for 32 months, the El Tor strain survives at >3,000/ml and for 13.5 months the classic strain survives at 2,200/ml. When kept at 35 to 37°C for 13.5 months, El Tor survives at 1,400/ml, and for 3.5 months, the classic strain survives at >3,000/ml. This shows that *vibrio cholerae* survive the longest at 24 to 28°C, more than 13-32 times that of preservation of freezing and 4 to 8°C. The next best preservation temperature range is between 35 to 37°C, more than 3.5 to 13 times that of storing at freezing and 4 to 8°C (Table 3).

Table 3. Survival Rate at Various Temperatures and for Different Lengths of Time in PBS

Preservation temperature (°C)	Strain*	Survival rate for length of time (in months)														
		0.5	1	2	2.5	3	3.5	4.5	5.5	6.5	7.5	10.5	11.5	13.5	32	
Freezing	El Tor classic	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
4-8°C	El Tor classic	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
24-28°C	El Tor classic	>3 >3	>3 >3	>3 >3	>3 >3	>3 >3	>3 >3	>3 >3	>3 >3	>3 >3	>3 >3	>3 >3	>3 >3	>3 2.2	>3 0	
35-37°C	El Tor classic	>3 >3	>3 >3	>3 1.7	>3 >3	>3 >3	>3 >3	2.8 0	>3 0	>3 0	>3 0	2.5 0	>3 0	1.4 0	ND 0	

*Bacteria before experiment El Tor is 3,000/ml; classic is 2,100/ml

0 = no growth; ND = not done

5. Results of Fl Generation Characteristics When Preserved in PBS at Various Temperatures and at Different Lengths of Time

When kept in PBS at various temperatures and for different lengths of time, the morphology of the Fl generation culture can be studied when stained with Gram's stain. We can also inoculate the strains in alkaline peptone water and agar petri dish for colony characteristics observation. We can also study the antibody serological agglutination for their agglutinating properties. The results show that the bacteria all died at freezing and 4°C after 15 days. At 24 to 28°C for a period of 13.5 months, the two cultures contain minute colonies of slime molds, but otherwise the morphology and serological agglutinating reactions are all normal and show no obvious changes. At 32 months, El Tor still has normal morphology, with more slime mold growth and a slower serological agglutinating reaction. From 3.5 to 32 months, the morphology, colony characteristics, and serological agglutinating properties of the two strains are quite comparable when kept 35 to 37°C and when kept at 24 to 28°C (Table 4).

Discussion

The optimal temperatures of survival of vibrio cholerae in vitro have been studied in different materials and with different biotypes by various researchers, the results are, therefore, not comparable. For example, the research of Politzer³ and Felsenfeld⁴ show that the survival rate is higher in the refrigerator than at room temperature for biotypes preserved in sterilized water. Takano, et al.,⁵ pointed out that in studying the preservation of vibrio cholerae in various concentration of salt solutions, the length of survival at room temperature and 37°C (1 to 30 days) is much longer than at 2 to 4°C (7 and 1/2 hours to 10 days). Our experimental results prove that no matter whether preservation is in semisolid culture or pH 8.0

Table 4. Colony Characteristics of F1-Generation Culture Preserved in PBS at Various Temperatures and for Different Lengths of Time

Preservation temperature (°C)	Strain	F1-generation colony characteristics for lengths of time (in months)														
		0.5			3.5			6.5			13.5			32		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Freezing	El Tor classic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-8°C	El Tor classic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-28°C	El Tor classic	N	N	N	N	M+	N	N	M+	N	N	M+	N	N	M++	L
		N	N	N	N	M+	N	N	M+	N	N	M+	N	N	M++	L
35-37°C	El Tor classic	N	N	N	N	M+	N	N	M+	N	N	M+	N	N	M++	L
		N	N	N	N	M+	N	0	0	0	0	0	0	0	0	0

Note: N = normal
M+ = a few colonies of slime mold
M++ = more colonies of slime mold
L = slow serological agglutination reaction
A stands for morphology
B stands for colony characteristics
C stands for serological agglutination

PBS, the length of survival at room temperature (24 to 28°C) and 37°C is the longest (24 to 32 months), at 4 to 8°C and freezing the survival time is the shortest (15 to 30 days). Therefore, the optimal temperature for the two biotypes of vibrio cholerae is room temperature (24 to 37°C), and not in the refrigerator (less than 8°C). These results are quite comparable to that of Takano, et al. However, our results show that the rate of survival is 20 to 30 times longer than theirs.

According to the experimental results, the optimal survival temperatures are: 24 to 28°C > 35 to 37°C > 4 to 8°C > 0°C or lower. Another result of the experiments is that in preserving vibrio cholerae in 0.01M pH 8.0 PBS, room temperature (24 to 28°C) and (35 to 37°C) for a long period of time (24 to 32 months), the F1 generation culture colony characteristics and antigen reactions are not affected in any obvious ways. We, therefore, conclude that the best temperature to store vibrio cholerae is at 24 to 28°C and 35 to 37°C. Kept at these temperatures in semisolid media, vibrio cholerae can be preserved for more than 2 years without concern for abnormal development. It is a well-known fact that the cold temperate zone is an area that shows a strong tendency of seasonal changes in temperature and the rate of cholera, and winter is the low season.⁶ What is the reason behind this? According to our experimental results, an observation can be made of the seasonal variation in the incidence of cholerae and their survival rate. Because the temperature is low in winter, vibrio cholerae die easily. A low survival rate means a lower possibility of infection, and in turn

translates into a lower incidence of cholera. Then how do the vibrio cholerae survive the winter to the following summer and cause a higher incidence of cholera? This is a more complicated question, but according to the temperature of survival of the vibrio cholerae, the wintering locations of the bacteria must be at locations of higher temperature, such as the human intestine (in carriers) or in alkaline organic matter in the depths of reservoirs. It is not possible for the bacteria to exist in in vitro locations that are low in temperature or in water sources. Therefore, in order to prevent the spread of cholera by managing its origin, we have to emphasize the monitoring and control of carriers and contaminated reservoirs, ponds, harbors, and other locations where the water is deep and the presence of alkaline organic matter is prevalent. Many epidemiologists have claimed that bacteria carriers are a source of localized outbreaks, at least in the case of cholera.⁶ Our research results show that this position is supported in theory, and the results should provide some guidance in the actual prevention and control of cholera epidemic.

According to our research results, semisolid media with liquid paraffin or 0.01M pH 8.0 PBS diluted alkaline pepton water can be used to store vibrio cholerae at around 26°C at least for 1 to 3 years. Transferring the cultures once does not seem to affect the virility of the bacteria. Therefore, the above procedure seems to be a simple and reliable method of preserving vibrio cholerae. This method can enhance efficiency and save up to 6 to 10 times in material expenditure.

REFERENCES

1. "Handbook of Bacteria Preservation," editorial group, Microbiology Institute, Chinese Academy of Science Handbook of Bacteria Preservation, in Chinese, Scientific Press, Beijing, 1980, pp 610-731.
2. Zhengyang Xie, JOURNAL OF MICROBIOLOGY, Vol 7 No 4, 1959, pp 375-381.
3. Pollitzer, R., "Cholera," WHO, Geneva, 1959, pp 159-186.
4. Felsenfeld, O., "The Survival of Cholera Vibriosin," edited by Dhiman Barum and William Burrows, CHOLERA, London, 1974, pp 360-364.
5. Takano, R., et al., "Studies of Cholera in Japan," Geneva, 1926, pp 62-70.
6. Barua, D. and Burrows, W., CHOLERA, London, 1974, pp 367-397.

12996/9365
CSO: 5400/4101

IDENTIFICATION OF CITROBACTER ISOLATED FROM CLINICAL MATERIAL

Beijing WEISHENGWUXUE TONGBAO [MICROBIOLOGY] in Chinese Vol 13 No 3, Jun 86
pp 128-130

[Article by Gao Yi, National Center for Clinical Laboratory, Beijing Hospital]

[Text] The Genus *Citrobacter* belongs to the family Enterobacteriaceae. According to 1980 internationally defined, the genus *Citrobacter* is composed of three species: *C. freundii*, *C. diversus*, and *C. Koseri*.¹ In order to correctly identify these bacteria for clinical treatment and pathological analysis, we have studied the biochemical reactions of *Citrobacter* obtained from clinical specimen during the past 2 years, and selected some of the principle tests for the identification of these bacteria.

Materials and Methods

1. Source of Bacteria Cultures: There was a total of 35 cultures isolated from clinical specimen during the period of December 1978 to March 1981.
2. Method of Identification: Biochemical studies were performed according to the method of Ewing.²

Results and Discussion

1. Biochemical Reaction of 35 *Citrobacter* Cultures (Table 1)

According to the results of Table 1, the 35 cultures matched the definition of *Citrobacter*. Among the 35 cultures, 26 were classified as *C. freundii*, 6 as *C. diversus*, and 3 as *C. Koseri*. The biochemical characteristics of the three species are as follows: *C. freundii* is negative for both indole production and adonitol fermentation, it produces hydrogen sulfide, and fails to utilize malonate; *C. diversus* is indole and adonitol positive, does not yield hydrogen sulfide, utilizes malonate, and decarboxylates ornithine; *C. Koseri* is positive for indole production, negative for malonate utilization and hydrogen sulfide production, and fails to decarboxylate ornithine.

Among the 35 cultures of *Citrobacter*, 18 cultures produced acid from lactate following overnight incubation. These cultures also yielded blue color on China blue agar plate. Twenty-six cultures produced acid in Triple Sugar Iron (TSI) agar medium.

Table 1. Biochemical Reactions of 35 *Citrobacter* Cultures

Test	<i>C. freundii</i> (26)	<i>C. diversus</i> (6)	<i>C. Koseri</i> (3)
Triple sugar iron	19*	6	1
H ₂ S	25	0	0
Indole	0	6	3
M-R	26	6	3
V-P	0	0	0
Citrate	26	6	3
Gas production	26	6	3
Acid production			
Lactate	17	0	1
Sucrose	20	6	3
Maltose	26	6	3
Arabinose	25	4	3
Erythrose	0	0	0
Raffinose	19	6	3
Rhamnose	26	6	3
Xylose	24	6	3
Trehalose	23	6	3
Mannitol	26	6	3
Sorbitol	25	6	3
Dulcitol	10	2	1
Inositol	0	0	0
Adonitol	0	6	0
Salicin	1	0	0
Pectate	13	6	0
Motility	26	6	3
Ureas	0	0	0
Arginine	4	3	0
Ornithine	3	6	2
Lysine	0	0	0
Malonate	0	6	0
Jordan's tartrate	26	6	3
Mucate	26	6	3
α -methyl glucoside	0	0	0
Sodium acetate	26	6	3
Phenylalanine	0	0	0
Gelatin	0	0	0

*Numbers represent the numbers of cultures showed positive reactions after incubating for 24 hours, numbers in the parentheses are the number of cultures tested.

2. The Differentiation Between Citrobacter and Other Species of Enterobacteriaceae

Since Citrobacter causes primary and secondary infection in human beings such as respiratory and urinary infections and bacterium, etc.,³⁻⁵ it is important to correctly identify these bacteria. The general characteristics of Citrobacter are similar to the other species of Enterobacteriaceae. Citrobacter was regarded as a slow fermenter for lactate. However, among the Citrobacter cultures reported here, a number of the isolates were able to ferment lactate rapidly. Their morphology on China blue agar slab and their reactions in triple iron agar medium were similar to E. coli. The slow lactate fermenter showed pink color on China blue agar slab and, therefore, resembled Klebsilla. Based on the above variations, special attention should be given in order to correctly identify Citrobacter. The characteristics for the identification of Citrobacter should include: positive for methyl-red, negative for Voges-Proskauer reactions, and utilization for citrate.

3. Identification of Citrobacter by Biochemical Methods

According to the classification of Enterobacteriaceae by Ewing, there is only one species of Citrobacter.² Bergey's classification method designated Citrobacter as having two species. The so-called Citrobacter intermedius has two biogroups. Internationally, new species have been reported since 1971, and the Citrobacter intermedius was delineated.^{6,7} Studies during the past have indicated that different species of Citrobacter showed different sensitivities to antibiotics.⁸ The variation in antibiotic sensitivity are important in treating the Citrobacter related diseases. The principle biochemical terms for the differentiation of the three species of Citrobacter are the indole test, reactions to adonitol, H₂S, and malonate. The results are shown in Table 3.

4. Results of Citrobacter Isolates

It can be seen that most Citrobacter isolates were C. freundii. There were fewer C. diversus, and C. Koseri appeared only infrequently. Presently there are not many publications on the pathological aspect of Citrobacter. More studies are needed in this area.

Table 2. Differentiation Between Citrobacter and Other Enterobacteriaceae

Test	Citrobacteriaceae	Klebsiellaceae	Proteaceae	Salmonellaceae	E. coli	Edwardsiellae
Indole	+/-	-	+/-	-/+	+	+
M-R	+	-	+	+	+	+
Citrate	+	+	-/+	-/+	-	-
Lysine	-	-	-/+	+	+/-	+
Phenylalanine	-	-	-	-	-	-

Table 3. Biochemical Differentiation of the Genus *Citrobacter*

Test	<i>C. freundii</i>	<i>C. diversus</i>	<i>D. Koseri</i>
Indole	-	+	+
H ₂ S	+/-	-	-
Adonitol	-	+	-
Malonate	-	+	-

REFERENCES

1. Sherman, V.B.D., et al., J. SYS. BACT., No 30, 1980, p 225.
2. Ewing, W.H., "Identification of Enterobacteriaceae," 3d edition, Burgess Publishing Co., 1972, pp 141-144.
3. Jones, S.R., J. INFECT. DISE., No 128, 1975, p 563.
4. Madroco, A., AM. J. MED. SCI., No 270, 1975, p 497.
5. Ibid., "Massive Empyema Due to *Citrobacter diversus*," CHEST, No 68, 1975, p 104.
6. Young, V.M., J. SYST. BACT., No 21, 1971, p 58.
7. Ewing, W.H., Ibid., No 22, 1972, p 12.
8. Lund, M.E., APPL. MICROBIO., No 28, 1974, p 22.

13048/9365

CSO: 5400/4127

PHILIPPINES

BRIEFS

QUEZON CITY MEASLES EPIDEMIC--The World Health Organization [WHO] has expressed concern over the measles epidemic in Quezon City which, reports said, have already killed over 300 children. The WHO office in Manila suggested the immunization of children against measles. The organization has declared 1987 as the year to promote immunizations to prevent measles and five other diseases that have the potential to kill children. [Text] [Manila Far East Broadcasting Company in English 2300 GMT 23 Apr 87] /9604

CSO: 5400/4358

ST VINCENT AND THE GRENADINES

GOVERNMENT HIT FOR LACK OF AIDS POLICY, WITHHOLDING OF DATA

Kingstown THE VINCENTIAN in English 13 Mar 87 pp 1, 16

[Excerpts] At present, St. Vincent and the Grenadines, to the best of THE VINCENTIAN's knowledge, has no policy on the disease, no task force or sub-committee on AIDS. No well co-ordinated monitoring or surveillance among the population exists. THE VINCENTIAN raised the question of AIDS as a Public Health issue with the newly appointed Head of Public Health. She admitted concern about the implications of AIDS, for the nation. But she could give no suggestions regarding the translation of these concerns into action.

Public Health measures, presently used by other countries include: 1. isolating the infected persons, 2. restricting their travel, 3. providing sterile needles to intravenous drug users, 4. encouraging the use of condoms.

That AIDS is present on St. Vincent is a known fact. It has been confirmed by a top-ranking health official. That various authorities who hold the facts are unwilling to make these facts known is unfortunate. The disease, Acquired Immune Deficiency Syndrome, kills by destroying the body's immune or defence system in the blood. Therefore, deliberately covering up information on AIDS or avoiding the collecting of information on AIDS is a dis-service to the country. The latest WHO figures list St. Vincent as having reported three cases on 30.06.86

/13104

CSO: 5440/096

DISEASE CONTROL EFFORTS

Results of Vaccination Program

Dakar LE SOLEIL in French 7 Apr 87 p 3

[Interview with Minister of Public Health Marie Saar Mbodj by journalist Fara Diaw; date and place not given]

[Text] The objective of 75 percent set by the chief of state and his administration with respect to the accelerated vaccination program has been reached and greatly surpassed, according to preliminary disclosures made to us by Minister of Public Health Marie Sarr Mbodj in an exclusive interview.

With regard to the various rates of vaccinal coverage for this program's antigens, the minister of Public Health told us that 95.5 percent has been achieved for BCG (anti-tuberculosis vaccine), 82.7 percent for measles, 82.4 percent for yellow fever, and 83.6 percent for DTCP (combination of different medicines for diphtheria, whooping cough, tetanus, and poliomyelitis).

Marie Sarr Mbodj emphasized that there have been constant concerns during the course of this program connected with management of material, the proper functioning of refrigeration equipment for the preservation of vaccines, the supply of vaccines, etc. She stated that the government will continue with its plan and that it will promote medical education in order to keep alive the people's response to the vaccines.

[Question] Madame Minister, as in the case of countries throughout the world, Senegal on 7 April will celebrate World Health Day. This year the theme will be vaccination. We would like to take this opportunity to ask you if the objective of 75 percent set by the chief of state for this occasion has been reached.

[Answer] Our country, as an international community member of WHO, celebrates World Health Day on 7 April 1987. The theme, which this year is "Vaccination: a Chance for Every Child," has a very special significance for Senegal. As you have said, this 7 April coincides with the time set by the president of the republic for the vaccination of 75 percent of the

Senegalese children from zero to 23 months. That objective has been reached, as the chief of state pointed out in his traditional message on 4 April.

[Question] Can you tell us how things stand?

[Answer] In asking for a balance sheet I think that you above all wish to know of the various rates of vaccinal coverage obtained for the program's antigens. In this connection, by 6 April 1987, for a population target of 500,000 children from zero to 23 months, not including children without completed obligatory forms, the following percentages were attained:

95.5 for BCG
82.7 for measles
82.4 for yellow fever
83.6 for DTCF

I should also mention that, in addition to the pregnant women that we vaccinated against neonatal tetanus (76,000), we have vaccinated 41,000 children over 23 months; these figures were not included in the above statistics.

[Question] What particular stumbling blocks in this accelerated phase did your departments have to face at the level of management, human resources, material?

[Answer] I think that the stumbling blocks that you mention were inevitable in a program of this scope. However, if at the level of the management of material, the proper functioning of refrigeration equipment, the regular supply of gas and of vaccines have been constant concerns, it should be noted that at the level of the management of human resources, we have only praise for the commitment and availability of the various staffs of the Health Department.

[Question] What provisions (or corrective measures) does the government, in cooperation with UNICEF and other involved organizations, intend to take in the future?

[Answer] If I fully understand your question, I can divide it into two complementary questions: what remains to be done and how must it be accomplished? What remains to be done is the attainment of 100 percent of vaccinal coverage in the zero to 23-month block, out initial target. You can see from the results that have been achieved that the difference is only 4.5 percent for BCG and 17 percent for yellow fever. In order to make up this difference, and there I respond to the how, we will vaccinate the children who have not yet been reached; we will continue with our plan, which has proved its effectiveness; and we will expand continuing health education, with the objective of getting parents to respond to vaccination.

[Question] How do you evaluate the mobilization of the people during the course of this PEV [Expanded Vaccination Program] and particularly during the course of this accelerated phase?

[Answer] Instead of evaluation, let us appreciate the general and constant mobilization on behalf of the PEV. The ministries, federations, organizations, associations, friendship societies, trade unions; the highest ranking political, religious, and private sector personalities, and common individuals, have provided massive support, without reservation, to the PEV--which has truly been everyone's affair.

[Question] Does the government intend to place vaccination within the framework of the Primary Health Care Department?

[Answer] I think it is necessary to take care not to place vaccination outside the Primary Health Care Department: it is an essential component of it. As such, it carries out a continuing health department function and therefore meets the requirements for utilization in the Primary Health Care Department. However, with its PEV experience, it is perfectly possible to make it a spearhead for our strategy, and it is in this direction that we are heading.

[Question] What message do you wish to send the Senegalese people?

[Answer] First, our thanks: to everyone, for the confidence that it has placed in us in the planning and carrying out of the program and for the moral and technical support given us throughout this phase; then an appeal to the Public Health professionals and to the families to continue the effort to achieve universal vaccination as soon as possible.

AIDS types, Incidence

Dakar LE SOLEIL in French 9 Apr 87 p 2

[Article by Fara Diaw: "Much Has Been Accomplished"]

[Text] Senegal, that is, its researchers and its authorities, began very early to seriously study the problem of AIDS. This occurred well before 16 May 1986, when the 39th World Health General Assembly officially launched a world-wide strategy to prevent and combat the calamity.

Proof: Cooperative research was started more than 2 years ago between Senegalese researchers, specialists in bacteriology and in virology, and some of their counterparts in the French universities of Limoges and of Tours, as well as the College of Public Health in Boston (U.S.A.).

Through this cooperation, they discovered and isolated in Senegal the HTL V4 virus, which is nonpathogenic and is capable of inducing protective

antibodies. This cooperation is carried on without letup, because it opens up prospects for vaccination.

These studies, which made it possible to arrive at this stage, had also led the researchers, after an analysis of specimens from a sampling of sick persons and of prostitutes (chief high risk group, because the virus is transmitted above all through sexual intercourse), to ascertain that Senegal had been relatively spared.

However, the checking of prostitutes, a Senegalese pilot role in the world, is still going on, and the data that is gathered should make it possible to prevent an explosive situation.

Some sero-epidemiologic studies were started a very long time ago in our country and our researchers have made some studies in the sub-region.

Since October 1986, a multidisciplinary national committee that has essentially concentrated, according to the situation of the moment, on promoting prevention and educating the population, chiefly groups of people, is on site.

Its work began without waiting for an official stamp, which will not be long in coming. For its national program, the committee established several objectives, including disease control through prevention of the transmittal of the retrovirus by carrier persons to healthy persons, treatment of sick persons, and above all disease prevention.

The objectives should be reached through the services of three groups of specialists: the first will focus on the sero-epidemiologic phase; the second, on the clinical; and the third, on education. The multidisciplinary committee will be the overall coordinator. The jurisdiction of the latter includes responsibility for conceiving a national plan for the prevention of AIDS, for coordinating all studies, research, and activities that are developed in all sectors having a bearing on AIDS, for synthesizing all results of sero-epidemiologic, clinical, and preventive research and work, for participating in research to find ways to carry out the work of the programs, for producing an information and training bulletin for health personnel, for preparing legislative and regulatory provisions needed in connection with the prevention of AIDS, for informing governmental authorities concerning the epidemiologic situation, and finally for collecting statistics on cases.

Participating in the three kinds of work are: epidemiologists and specialists in the laboratory diagnosis of AIDS (a sero-epidemiologic group directed by Prof Souleymane Mboup); clinicians capable of recognizing, diagnosing, and caring for cases of HIV infection; and specialists in laboratory diagnosis (a clinical control group directed by Prof Abdourahmane Sow).

The group that is responsible for education anticipates scheduling information discussions and conferences within the country.

Presided over by the director of Hygiene and Sanitation (DHPS), Col Mame Thiemo Aby Sy, and with chief secretary Dr Ibra Ndiaye, head of the department that combats sexually transmitted diseases (MST), the committee meets once every 3 months; its limited group meets every month.

At present all the studies that have been carried out in Senegal (I have personally examined them very closely) are of international repute and even provide an example. We have the people that are necessary. May they have more ample means for effective work.

[Boxed item, p 2: "Seven Cases In Senegal"]

Yesterday during a meeting, in the office of Hygiene and Sanitation, of some administrative members of the National Committee for the Prevention of AIDS, including Professors Sow and Mboup and Dr Ibra Ndiaye, we were told that there were probably seven or eight cases.

In December, five cases (included in the above mentioned total) had been listed and, after some objective studies, it was determined that all of the cases were the result of exogenous contamination; that is, that they had taken place outside the country, in areas of widespread endemic diseases. Three deaths were recorded. But this number must be of some comfort to the population when it compares the number to what is taking place abroad; however, the deaths should also prod the population to become more informed regarding precautions that must be taken.

8255

CSO: 5400/10

SWEDEN

MINISTER REJECTS PROPOSALS FOR FORCED AIDS TREATMENT

Long Waiting Time For Tests

Stockholm SVENSKA DAGBLADET in Swedish 1 Apr 87 p 6

[Article by TIDNINGARNAS TELEGRAMBYRA: "Waiting Lines Too Long For HIV Test"; first paragraph is SVENSKA DAGBLADET introduction]

[Text] "The waiting time for those who want the HIV test is unacceptable. More money and personnel are needed to facilitate the possibilities of being tested."

That is the opinion of the Society of Doctors Against Aids expressed in a letter to the Social Department and the Social Welfare Board, among others, reports TIDNINGARNAS TELEGRAMBYRA.

"Those who want to be tested today can in the worst case wait up to five weeks. That is very unfortunate considering that the current campaign is causing concern about HIV infection and recommends increased HIV testing," it says.

The society therefore fears that many who want to be tested will refrain because of the long waiting time.

Many will perhaps instead go to blood donor centers, where they believe they can get an answer to whether it is HIV infected, and thus be blood donors.

"This can in a very unfortunate way increase the amount coming to blood donor centers from individuals who can increase the risk of spreading HIV infected blood," fear the Doctors Against Aids.

The society believes, however, that the campaign against HIV infection has many positive sides.

Obligatory Testing Turned Down

Stockholm SVENSKA DAGBLADET in Swedish 31 Mar 87 p 2

[Editorial: "Sigurdson Says No"]

[Text] Minister of Health and Social Affairs Gertrud Sigurdson has rejected the proposal for general and obligatory HIV testing. That happened in an article in Monday's DAGENS NYHETER. The definite tone and absence of candour in the report indicate that the issue is decided by the social minister.

There are strong reasons to fear that this is so. The all-inclusive testing will be delayed for an indefinite period.

Mrs. Sigurdson claims that the testing would be a "magnificent blow in the wind." Her main objections are the great costs and the proportions between the infected and the uninfected.

The cabinet minister calculates that a general test would need to include five million people. The cost would be half a billion.

The cabinet minister also calculates that there are now about 5,000 infected people in the country. If a general test were carried out twice each year that would mean, said the social minister, that the health authorities would have to conduct 1,999 negative tests for every positive test.

In relation to the terrible social danger involved, neither the first nor the second are valid arguments. HIV infection is now spreading at a rate which doubles the number of infected persons each year. 5,000 this year, 10,000 the next, 20,000 the following year. The doctors' prognoses of how large a percentage of those infected will also get AIDS has so far time after time been adjusted in a more pessimistic direction. It is now not excluded that the majority of those with HIV infection will die of AIDS.

AIDS can be the greatest trial to which our society has been exposed in this century. A cold analysis of the risk picture the scientists have given us can lead to even worse apprehension.

Against that background the economic objections are irrelevant. The decisive factor is not whether a measure costs half a billion per year, but whether it is appropriate to the purpose.

It is a very strange argument against the test that only half per thousand can be assumed to be positive. In that case it must be reasonable to prefer to start the test now than to wait until the number of infected persons rises to one, two, four or eight per thousand.

Because the test of course has a purpose, namely to localize the carrier by various means--in the vast majority of cases merely by being aware of his situation will prevent him from being a carrier.

Cabinet Minister Sigurdson is naturally not uninterested in getting hold of carriers through testing. But she will adhere to voluntary means and campaigns aimed at special groups. "It is important to concentrate testing in certain groups of individuals in which we can expect the infection exists."

But within the total, largely unknown group of HIV infected persons there are people who are quick to deny responsibility, including those to whom it simply would not occur that they had become infected.

Sigurdson probably correctly believes that if the tests are voluntary, many of those tested will prove to be infected. But unfortunately this does not mean that enough of the infected ones will be tested. Life-threatening sources of infection will continue to be active risks. Sooner or later the state will realize the necessity of tracking them down. Even if it happens within one year, people are going to condemn the previous negligence.

9287

CSO:5400/2460

SYPHILIS, GONORRHEA CASES POST STEADY DROP

Stockholm SVENSKA DAGBLADET in Swedish 8 Apr 87 p 10

[Article by Anna Jerden: "Fewer Catch Syphilis, Gonorrhea"; first paragraph is SVENSKA DAGBLADET introduction]

[Text] Syphilis and gonorrhea continue to decline drastically in Stockholm County, while HIV and AIDS increase. Diphtheria remains in Stockholm, and 10 residents were infected in 1986.

In five years the number of cases of syphilis in Stockholm County has declined to one-tenth, from 292 to 30 cases. The same is true of gonorrhea. In 1982 nearly 4,000 residents of Stockholm had gonorrhea, last year it was 1,171.

"The decline in syphilis arrived at the same time as the increased information about AIDS. The decline in gonorrhea began before that, and we do not know what caused it," said Carl-Fredrik de Ron, infectious diseases doctor in Stockholm.

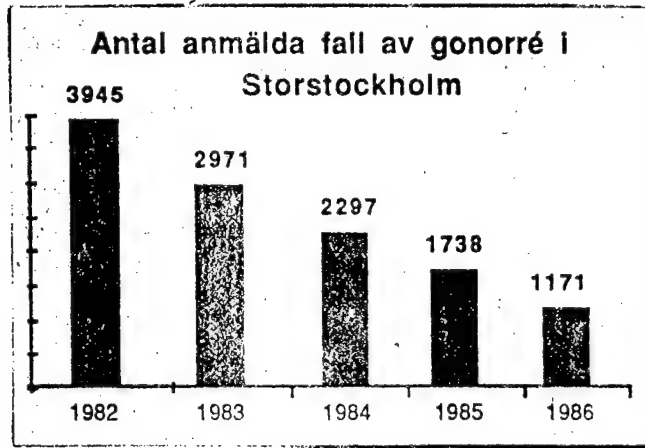
"We can only speculate that youths have changed their sexual habits," he said.

HIV and AIDS are increasing as rapidly as syphilis and gonorrhea are declining. In 1986 795 residents of Stockholm were registered as infected. That is almost four times as many as the 199 that were registered in 1985. The number of AIDS cases increased from 2 to 56.

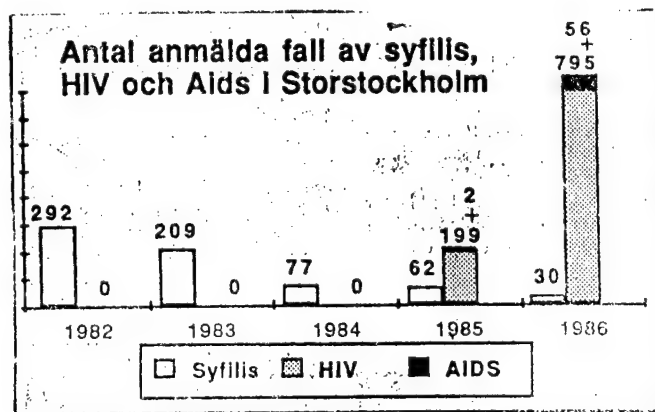
Salmonella dominates among the other infectious diseases. There were 651 cases reported in 1986, mostly in connection with vacation travel. Tuberculosis is not eliminated. There were 180 new cases in 1986.

Diphtheria entered Stockholm in 1984 with 20 cases. During the two following years 20 people were infected or became ill.

"We have the infection among homeless, alcoholic men, and it is therefore very difficult to get rid of. It is good that we have only had three cases since August of last year," said de Ron.



Captions: Number of registered cases of gonorrhea in Greater Stockholm. During the past five years the number of cases of gonorrhea has fallen sharply in Stockholm County.



Captions: Number of registered cases of syphilis, HIV and AIDS in Greater Stockholm. The increase of HIV and AIDS registered so far is more dramatic than the decline of venereal diseases, as for example syphilis.

It is not just young women who catch the venereal disease chlamydia. Men are also catching it to a large extent. This was shown by the first Swedish study of young men published in LAKARTIDNINGEN. Of 105 men examined in Stockholm County it was found that 10 percent, or 11 persons, carried the infection.

"The large number of chlamydia infections are of concern, and are in agreement with the knowledge that the infection is common among women who attend youth receptions," say the three doctors, Sten Larsson, Ann-Kerstin Ruden and Solgun Bygdeman, who are responsible for the investigations.

9287

CSO: 5400/2460

GOVERNMENT SAYS AIDS DEATH TOLL NEARS ONE PER DAY

Belfast NEWS LETTER in English 11 Apr 87 p 7

[Text]

ANOTHER 28 people died from Aids in the United Kingdom during March — almost one a day.

According to the Department of Health yesterday 405 people have now died from the virus in Great Britain and Northern Ireland.

Figures for Ulster showed no change. There have been four cases of fully blown Aids in the Province, two of whom have died. The other two have left Northern Ireland.

A total of 329 people in Britain were diagnosed as having Aids at the end of March, compared with 354 the previous month.

The Government still expects that 4,000 people will have died from Aids by 1990.

Social Services Secretary Norman Fowler said the apparent decrease was the result of a rigorous check of the records to eliminate past double-counting.

"Thirty-two new cases were in fact reported in March," he said.

"The public education will continue and one of the next campaigns will be directed at drug misuse and the sharing of equipment."

Latest figures showed that 5,571 people have had positive Aids tests.

In Scotland, 659 of the 1,100 people known to have been infected are drug abusers. Only 169 are

homosexual or bisexual.

This contrasts sharply with the rest of the United Kingdom where 2,377 of the people infected are homosexual or bisexual and only 280 drug abusers.

Aids is still largely confined to known risk groups, with little spread into the general community.

Seven British children contracted Aids — four of them have died — after being born to mothers carrying the virus.

And 31 haemophiliacs, plus 13 people who received contaminated blood in transfusions, also suffer from the killer virus.

Meanwhile, the Government has been accused of adopting a "rob Peter to pay Paul" approach to finance its £4 million Aids campaign.

Mr Roger Poole, national officer of the biggest health union, NUPE, claimed some of the cash had been transferred from other vital areas of health research, because it was the politically popular thing to tackle.

Self-catering holiday centres for Aids victims are being planned by two businessmen who opened Britain's first private blood bank.

Mr Jonathan Lister and Mr Peter Arthur are to launch Buddy Self-Catering Holidays.

Victims and their partners will be able to stay for as long as they want at £150 a week each.

/9317

CSO: 5440/098

UNITED KINGDOM

BRIEFS

MENINGITIS DRUG--A drug recently introduced to Britain has proved successful in almost eradicating meningitis at the Royal Navy training base at HMS Raleigh at Torpoint, Cornwall. The anti-biotic Ciprofloxacin, developed in America, was given to 2,000 staff. At the time there were 406 known carriers of the bacterium. Now the figure has dropped to 14. Dr Nicholas Grant, Plymouth's consultant microbiologist who supervised the programme said: "People were not used as guinea-pigs. It was not the trial of a new drug but management of an outbreak." [Text] London THE DAILY TELEGRAPH in English 10 Apr 87 p 2] /9317

CSO: 5440/098

NORAD OFFERS AIDS RESEARCH ASSISTANCE

Lusaka SUNDAY TIMES OF ZAMBIA in English 5 Apr 87 p 1

[Text]

THE Norwegian Agency for Development (Norad) has joined Zambia's fight against the spread of AIDS with a pledge of material support for the research programme.

A four-man team from Norway's national institute of public health led by its director, Dr B. Hareide, will visit the Tropical Diseases Research Centre (TDRC) in Ndola this week to discuss cooperation between the two institutions on AIDS research, said a spokesman for Norad.

"So far Norad has given financial support to the Ministry of Health educa-

tion unit for an information campaign directed at the general public on prevention of AIDS," the spokesman said.

Norad has on its cards a nationwide blood screening programme initiated with funds from the World Health Organisation (WHO), which will be channelled through the Norwegian Red Cross.

The Norwegian Red Cross in association with the Panos institute of London has projected that the impact of AIDS on Third World development will be profound because of lack of proper health services, says a report.

/9317

CSO: 5400/168

BOLIVIA

BRIEFS

FOOT-AND-MOUTH OUTBREAK--An outbreak of foot and mouth disease was detected in the Maule zone of Chile, an area bordering Bolivia and Argentina. For this reason, MACA has alerted people and institutions that market cattle, goats, and pigs in that region. The National Directorate of Epidemiology under the Livestock Directorate of MACA received a communique from the Pan-American Foot and Mouth Disease Center based in Rio de Janeiro through PAHO in Bolivia. The disease that affects these types of livestock is foot and mouth disease subtype 0-1. The primary infection was detected on 15 February 1987 by the Chilean veterinary service. Causes of the disease include livestock smuggling in border zones between Chile and Argentina near Bolivia. Therefore, they established a quarantine and slaughtered 2,442 infected animals as of 23 March, the report added. The communique from MACA indicated: "Facing the danger that the livestock in our territory will be infected by this viral disease that spreads rapidly, all livestock institutions, livestock ranchers in general, and marketers of animal products and by-products are alerted to take the pertinent precautions in order to prevent the introduction of this terrible disease into this country." It also instructs them to follow the provisions for veterinary inspection established by the National Directorate of Animal Health and the offices of the Livestock Directorate of MACA. He added that it is necessary that those involved register their animal health permit to import animal products and by-products from abroad and receive guidelines and recommendations on the situation. The document concludes that epidemiological control must be agreed on not only by state organizations, but all the people in order to prevent foot and mouth disease in Bolivia. [Text] [La Paz HOY in Spanish 26 Mar 87 p 9] 7717

CSO: 5400/2039

GUINEA

BRIEFS

ANTHRAX KILLS CATTLE IN DABOLA--An outbreak of anthrax is currently affecting horned cattle in the Dabola region and has already killed 25 oxen in the Banco subprefecture. To prevent the epidemic from spreading all over the region, a team of veterinaries from the prefectural Animal Husbandry Department has been sent to the area and succeeded in immunizing 607 of the 1,507 cattle in the Gossama subdistrict. The team of veterinaries is now waiting for another shipment of vaccine from Conakry to treat the remaining 900 head. In the meantime, the team has taken various preventive measures such as preventing cattle from other areas from entering the affected zones, and killing and burying the animals affected by the disease. [Text] [Conakry Domestic Service in French 0645 GMT 30 Apr 87] /9604

CSO: 5400/167

ITALY

BRIEFS

SPREAD OF FOOT-AND-MOUTH--ANSA Brussels, March 10--More than 140 new centers of hoof-and-mouth contagion have been reported by cattle and hog raisers in Italy thus far this year, a number equal to all centers of infection registered in 1986, according to European Community sources who discussed spreading concern in EC headquarters with the progress of the disease afflicting Italian livestock. Speaking at the end of a meeting Thursday of the EC Veterinarian Committee, an advisory body, these sources said representatives of the twelve EC member-nations were greatly worried about the inability to curtail the disease after three-and-a-half years of combatting it. The commission, however, has no plans to change EC measures in this area now in effect, according to these sources. The experts were said to be studying new forms of prevention to apply at the local level and may complete proposals for presentation to the veterinarian committee at its next meeting in early May. Foot-and-mouth is a contagious, febrile disease of livestock in which ulcers are formed about the mouth and hoofs. It is caused by a filtrable virus. [Tex] [Rome ANSA in English 1043 GMT 10 Apr 87 AU] /6662

CSO: 5400/2472

EDITORIAL VIEWS SHORTCOMINGS IN LIVESTOCK VACCINATION

Vientiane PASASON in Lao 13 Mar 86 pp 1,4

[Editorial: "Preventing and Suppressing Animal Epidemics in a Timely Fashion"]

[Excerpt] In 1985 the drive to prevent and suppress animal epidemics did not do as well as it should have. In 1984 30 percent of all draft animals received injections to prevent and suppress animal epidemics, but in 1985 the figure was only 25 percent. For this reason a number of animals contracted pasteurellosis, anthrax and other diseases, and some died. These poor results limited, in many ways, the drives to raise crops and animals in some localities.

In order to avoid poor results like these, the localities and the involved branches will have to master the situation, adopt plans and allocate the work in detail in order to prepare medicine and train cadres in this specialty to coordinate the inspecting, directing and guidance in preventing and suppressing animal epidemics in the various localities effectively as conditions require. And they must try to concentrate on preventing epidemics, which is why the specialists have clearly scheduled injections twice a year for all animals against pasteurellosis: the first injections must be given before the rainy season starting in March and before May, the second injections must be given before the cold season starting in September and should be complete by November.

Injections for anthrax, swine cholera and Newcastle's disease should be given once a year either before the rainy season or before the cold season. It is prohibited to move infected animals or use the meat of animals which have died of disease for food.

If there were an epidemic, the veterinary cadres would have to mobilize their forces to control the disease. They would have to separate the sick animals and care for them urgently. And they would have to warn the people about the danger of contagion and methods of preventing it. A very important factor is that the ministry involved, the veterinary department and the laboratories producing vaccine be prepared with medicine, equipment and teams to control the epidemic so that they can work with and advise the localities in preventing and controlling epidemics and master the problem. In addition the party committees, all levels of the administration and all the cadres,

soldiers and people must always be aware of the threat of these epidemics. They must work together closely, help each other and have responsible people to lead and guide. They must take care to push activities to prevent and suppress epidemics regularly on the basis of a detailed plan produced with great responsibility. Production centers, settlements, agricultural cooperatives, villages and districts as well as the people must keep watch of animal husbandry; if they notice something in their locality or there is an epidemic, they should report to or see a cadre involved urgently so that the prevention and suppression of the epidemic can be carried out effectively.

8149

CSO:5400/4344

BOLIVIA

BRIEFS

COFFEE PLAGUE--If the BAB [Agricultural Bank of Bolivia] does not grant the resources that the coffee producers need to control the diseases that attack coffee, more than 30 percent of the crop can be lost this year, according to the director of plant health of MACA [Ministry of Agriculture, Campesino Affairs, and Livestock Affairs], Yerko Koucoch. He said that every effort to control the spread of diseases like "broca" and coffee rust through courses and training "has been sterile. They do not improve the situation at all because the peasant producers do not have the resources to purchase the treatment recommended by the technicians." He indicated that the region most affected by "broca" is Caranavi in Yungas, La Paz Department. This means almost 80 percent of the entire national coffee production. The coffee producers urgently need \$50,000 from the BAB. This sector has an average of 40,000 workers. Koucoch indicated that MACA cannot provide the treatment for the coffee growers due to the critical national situation. However, the BAB is in the position to do so. So far, however, it has not disbursed any credit for these sectors. He explained that the courses on coffee disease control taught by plant health technicians of MACA recommend the use of certain fertilizers and treatments that the peasants cannot buy because they lack the economic means. [Text] [La Paz EL DIARIO in Spanish 16 Mar 87 p 2] 7717

CSO: 5400/2039

NIGERIA

BRIEFS

ARMY WORMS INVADE BENDEL STATE--Parts of Bendel State have been invaded by a destructive species of insect known as army worms. A report from Benin says that the worms have caused extensive damage to crops and forced many people to flee from their homes. The worst hit parts are Oredo and Oryom local government areas. An official of the state Ministry of Agriculture and Natural Resources, Mrs Rachael Olotu, said that the ministry had already gone into action to control the spread of the worms. Mrs Olotu, who is the deputy chief research officer, added that her ministry had contacted the Federal Ministry of Agriculture in Benin for every possible assistance. She said that Bendel State had experienced an invasion of army worms in 1972, but the current one is more severe. Army worms are said to be a peculiar insect which thrive in warm conditions. There has been no rain in some of the affected areas for some time now. [Text] [Lagos Domestic Service in English 1500 GMT 12 May 87 AB] /6662

CSO: 5400/175

VIETNAM

HARMFUL INSECTS RAVAGE CROPS IN LOCALITIES

Hanoi HANOI DOMESTIC SERVICE in Vietnamese 9 May 87

[Text] The Vegetation Protection Department of the Ministry of Agriculture and Food Industry reports that over the past 10 days harmful insects have developed and damaged many crops. While northern provinces have begun harvesting the main rice crop, their late spring ricefields are being ravaged by harmful insects, especially brown plant hoppers, white rice leaf hoppers, rice bugs, green plant bugs, and stem borers.

The spreading of harmful insects has become an alarming problem in almost all provinces in the Bac Bo midlands delta and the former fourth zone areas. In southern provinces, grain leaf butterfly and paddy borers are appearing in summer-fall ricefields of the central coastal areas. In the Mekong River Delta area, paddy thrips are damaging the early summer-fall ricefields, while green leaf hoppers have appeared on jute, soybean, and peanut plantations about 20-25 days earlier than the corresponding period last year. Late blight has spread in soybean plantations and phytophthora infestants occurred in peanut plantations.

It is predicted that in the next 10 days brown plant hoppers will continue to damage ricefields in northern provinces; density of green plant bugs will increase on jute plantations; paddy thrips and stem borers will continue spreading and damaging summer-fall ricefields in provinces of the central coastal areas and the Mekong River Delta. Localities must continue their close watch on ricefields and promptly eradicate harmful insects in order to prevent an epidemic which will cause greater damage to various crops.

1180/13104
CSO: 5400/4365

INSECT PESTS, DROUGHT DAMAGE FIFTH MONTH, SPRING RICE

Hanoi NHAN DAN in Vietnamese 21 Mar 87 p 1

[Article: Protection of Fifth Month, Spring Rice an Urgent Task]

[Text] This year the fifth month, spring rice crop was planted on 1,805,000 hectares. This is 97% of the area targeted for cultivation and is a 2% increase over the previous fifth month, spring crop. According to forecasts from the various localities this year's fifth month, spring rice crop is progressing regularly and is fairly good. However in some areas of the southern provinces crop damage has been noted and insect infestation has appeared and is developing rapidly.

According to data provided by the Meteorology and Hydrology General Department the average temperature for the beginning of March in the Northern provinces was much higher than in previous years. During the end of March high temperatures continued. The torrid weather caused fifth month, spring rice to head early affecting future productivity. Also because of the high temperatures a number of insect pests and diseases became quickly evident. These included rice mealy bugs, stem borers, brown plant hoppers, blast, etc. According to data provided by the Statistics General Department as of 15 March 133,000 hectares or 13% of the rice fields nationwide suffered insect pests damage. This was 85,000 hectares more than for the same period last year. To assist localities in quickly stamping out diseases and saving the rice the Ministry of Agriculture has provided the provinces of Nghe Tinh and Thanh Hoa with an additional 80 tons of insecticide. It also made expeditious transfers of facilities to prevent and eliminate the problem such as pump sprayers, insecticide and fuel to those provinces where significant areas had suffered insect and disease damage. The provinces are concentrating their efforts in coordinating the employment of every preventive and remedial measure to wipe out insects and disease and to prevent their spread. In some parts of Nghe Tinh and Thanh Hoa provinces additional students and cadres were mobilized to assist in wiping out rice mealy bugs. As a consequence within a short period Nghe Tinh and Thanh Hoa Provinces destroyed more than 40 tons of rice mealy bugs using tweezers.

In addition to tending and protecting rice the nation continued to plant winter, spring vegetables and industrial crops. To date the various localities have planted 448,000 hectares of grains, 147,000 hectares of vegetables and 212,000 hectares of industrial crops. This is an increase of 9-23% over the previous crop. Peanuts and beans increased by 20-39% but the area planted in sugar cane went down 15% compared to the previous crop.

/12913

CSO: 5400/4361

RICE BLAST SAID TO HARM 5TH MONTH, SPRING RICE

Hanoi NHAN DAN in Vietnamese 19 Feb 87 p 2

[Article by Nguyen Ngoc Thuy, deputy director of the Crop Protection Department of the Ministry of Agriculture and Food Industry: "Take the Initiative in Preventing and Eliminating Rice Blast Harming 5th Month-Spring Rice"]

[Text] At present, many kinds of insects and diseases are erupting and developing on the spring rice seedlings and in the rice areas. The rice-harming rice blast disease, which is very dangerous, is threatening the intensively cultivated rice areas, especially spring rice, in the coastal provinces of central Vietnam and the former Zone 4, and in a number of provinces in the Bac Bo delta. At present, tens of thousands of hectares in the provinces of Nghia Binh, Quang Nam-Da Nang, Phu Khanh, Hau Giang, Tien Giang, An Giang, and Ben Tre are infected with the disease. Infestations of blight have been discovered among rice seedlings in such northern provinces as Nghe Tinh, Ha Nam Ninh, Thanh Hoa, Thai Binh, and Hai Hung. In Nghe Tinh alone thousands of hectares of rice seedlings are infected with disease and many new signs of disease have appeared in the rice plantings.

This year, more than 90 percent of the rice varieties, especially in the northern provinces, are infected with diseases. If, during the coming months, the skies are overcast and there is little sun, and if there is rain and high humidity, and conditions are favorable for diseases to spread and develop, it is possible that the rice will become heavily infected over a large area. In view of that situation, preventing and fighting rice blast and protecting the results of 5th month-spring production are urgent demands in the localities. Eliminating disease and saving rice are tasks as urgent as fighting the enemy, and to defeat the "enemy" we must understand them. Therefore, it is necessary to clearly understand the characteristics of the spread and development of diseases in order to take appropriate steps to prevent and eliminate them.

Rice blast damages the rice stalks, but it is usually most evident on leaves, spathes, and the stumps of stalks. It damages the leaves by wilting them. It damages the spathes by causing the rice heads to become hollow and white, or not to fill out, and makes the rice taste bitter. It damages the stump by causing the stalk near the roots to rot and the plant to fall.

The biological agent that causes rice blast is a type of fungus. When the spores are mature, they fall onto the leaves and the fungus germinates and forms hyphae which penetrate the leaves, develop threads, and repeat the life cycle. The spores usually are released at night. Under the conditions of high humidity, a large number of spores are generated. Ordinarily, one infestation can give rise to between 2,000 and 6,000 spores during the course of a night, a process which can continue for a week or two without interruption. The spores are spread by the wind and can spread very rapidly. Of course, that is also dependent on such external environmental conditions as the weather (thick cloud cover, overcast skies, and little sunlight), the rice variety (infected varieties, varieties with poor insect and disease resistance), fertilizer, water, the improper use of chemicals, etc.

In brief, rice blast is a disease which can be devastating if not stopped in time. Furthermore, chemicals to protect this year's winter-spring production season did not meet the plan norm. In view of that difficult situation, we recommend that the localities take the initiative in doing a good job of carrying out the following tasks:

It is necessary to strengthen the inspection work and discover and monitor the insects and diseases in each planting of rice, each rice paddy, and each field, and accurately and promptly estimate and forecast the important insects and diseases during the principal periods of time. Rice blast must be found on leaves early, in March and April, and it must be discovered on spathes by the end of April and in May. At the same time, it is necessary to closely monitor developments regarding the other pests, such as brown leafhoppers, rice hispa, stem borers, and rice bugs.

When rice blast appears it is necessary to spread nitrogenous fertilizer and retain the water in the paddies. Paddies which may be heavily damaged should be treated chemically. To eliminate rice blast of spathes with high efficiency it is necessary to spray kitadin or hinodan twice (once 5 to 7 days before the rice heads and a second time 7 days after the rice heads).

In order to strengthen and consolidate the specialized crop protection system extending from the provincial level down to the cooperatives, there must be a system of appropriate investment and compensation with regard to technical personnel. They must bring into play the positive nature of the renovation of the management mechanism in the crop protection sector to create along with a sense of responsibility of the workers combined strength to effectively protect production.

5616

CSO: 5400/4350

THANH HOA, NGHE TINH FIGHT INSECT INFESTATION

Hanoi NHAN DAN in Vietnamese 23 Mar 87 p 1

[Article: Thanh Hoa, Nghe Tinh Concentrate Forces to Prevent, Eliminate Rice Mealy Bugs, Protect Fifth Month, Spring Rice]

[Text] Since the beginning of March in addition to attacks by blast and brown plant hoppers the fifth month, spring rice has been infested by rice bugs which have appeared and spread at an accelerating rate and with a high density over hundreds of thousands of hectares in Thanh Hoa and Nghe Tinh provinces. According to estimates of the Plant Protection Department, Ministry of Agriculture and Food Industry, rice bug density in Tho Xuan District, Thanh Hoa province and the districts of Do Luong, Yen Thanh and Thanh Chuong, Nghe Tinh province is 100-200 bugs/meter² and in some areas it is as much as 8,000/10,000 bugs/meter².

In addition to coordinating with localities to establish guidance committees to fight rice bug infestation the Ministry of Agriculture and Food Industry has appointed two cadre groups from the Plant Protection Department to work in those two provinces. There they will observe and provide guidance on measures to prevent and eliminate the infestation. In addition the Ministry will expedite the supply of 60 tons of high potency insecticide and 2,500 hand pumps for those two provinces.

The two provinces will postpone unnecessary meetings and send cadre to the working level units and will send all the labor force to the fields. They will coordinate the employment of chemical insecticides and rudimentary measures such as crushing and burning with hand held clumps of straw. They will also see to the killing of rice bugs on trees bordering habitations, along the edges of forests and the use of tweezers in heavily infested rice areas.

In addition positive steps will be taken so that there will be sufficient insecticide to meet needs. Tho Xuan and Do Luong districts will provide capital for additional paddy and nitrogenous fertilizers as incentives for workers to participate actively in exterminating insect pests..

Localities will provide active guidance to working level units in strengthening the plant protection network at the district level and provide timely measures to prevent the spread of the infestation and to safeguard production.

/12913

CSO: 5400/4361

CROP PEST INFESTATION REPORT

BK050300 Hanoi Domestic Service in Vietnamese 0500 GMT 30 Apr 87

[Excerpt]

According to a communique of the Plant Protection Department of the Ministry of Agriculture and Food Industry, in the past 10 days, young bugs of the third litter have been hatching en masse in the northern provinces; and with a rapidly increasing infestation density, they have developed into a widespread plague. As of 25 April, some 360,000 hectares of winter-spring rice had been infested, a 50-percent increase over the last reported period, with a density ranging from 500 to 2,000 bugs per square meter. Pest infestation flare-up has occurred in areas with a high density of bugs -- 310 hectares in Thai Binh, 370 hectares in Thanh Hoa, and 500 hectares in Nghe Tinh. On the late rice plantings, bugs are continuing to hatch from their eggs which number, in hard hit areas, up to 10,000 per square meter. *Aphelenchoides oryzae* has done serious harm to the various rice plantings, especially the early ones; and rice blast has damaged the rice ear stems on about 16,000 hectares.

In Nghe Tinh, Thanh Hoa, and Binh Tri Thien Provinces, rice mealy bugs have continued to cause serious damage. Moths of the second litter of paddy borers are appearing en masse; and young bugs have turned to attack the ears of the blossoming rice plants.

Meanwhile, in the southern provinces, brown planthoppers and rice planthoppers have caused damage to more than 4,000 hectares chiefly in Phu Khanh and Nghia Binh Province. In addition to this, leaf folders have appeared in the Mekong Delta provinces.

It is forecast that in the coming period, for the northern provinces, the infestation density of young bugs belonging to the families of brown planthoppers and rice planthoppers will increase and reach a peak sometime in the middle of May. The pest infestation flare-up area will increase unless timely prevention and control efforts are undertaken. Rice blast and *aphelenchoides oryzae* will cause serious damage to the early rice plantings.

In the southern provinces, moths of paddy borers will appear in late April and early May in the coastal central provinces; and young bugs will do harm to the early and main rice plantings. Rice thrips will cause damage to the late summer-fall rice.

/9274

CSO, 5400/4362

INSECTS, DROUGHT DAMAGE RICE IN NORTH

Hanoi NHAN DAN in Vietnamese 1 Apr 87 p 1

[Unattributed report: "Strengthen Inspections, Look After and Protect the Fifth-month and Spring Rice; the Rice Area Affected by Harmful Insects and Drought Is Expanding"]

[Text] The northern provinces have finished the second weeding of the fifth-month and spring rice and weeded 40-60 percent of the area for the third time. The rice plantings in which the seedlings were sown and transplanted on schedule, quality was good, and things were done on schedule are growing well. This year, because the weather has been hot and a number of places did not handle the area transplanted in old seedlings on schedule, by the end of March, approximately 44,000 hectares of rice had headed. But because there have been several days of cold weather, yields will certainly be lower and there will be no harvest in a number of places. But the problem that needs attention today is that harmful insects are expanding over a broad area. Based on data of the Statistics General Department, by the end of March, more than 260,000 hectares, or 24.7 percent of the area sown and transplanted, had been affected by harmful insects, which is 3.5 times greater as compared with the same period last year. The rice area destroyed by harmful insects is concentrated in Thanh Hoa, Ha Nam Ninh, Nghe Tinh, Binh Tri Thien, Thai Binh, Hai Hung, Ha Son Binh, and Ha Bac provinces. During the next several weeks, the fifth-month and spring rice in the north will head. The rapid spread of harmful insects could have a serious effect on rice yields. Together with the localities, the ministries of agriculture and food industry have strengthened inspections of the fields, overcome the difficulties in supplying materials and chemical insecticides, and assembled material means and laborers in order to eliminate the harmful insects. The vegetation protection sector has quickly sent 30 motorized insecticide sprayers, 3,000 hand sprayers, and 80 tons of insecticide to Thanh Hoa and Nghe Tinh provinces in order to quickly stamp out the "rice mealy bug epidemic." Besides using chemicals, Thanh Hoa has mobilized the people to use manual methods to kill the rice mealy bugs. In just a short period of time, the province has caught more than 24 tons of rice mealy bugs. According to estimates, in April, many types of harmful insects will expand to the point of posing a great danger to the fifth-month and spring rice at the end of the season. The ministries of agriculture and food industry have proposed that the localities guide and organize things and implement integrated prevention and control measures, with

priority given to materials for protecting the fifth-month and spring rice. To date, in the north, approximately 226,000 hectare of fifth-month and spring rice have been damaged by drought. In this, 44,000 hectares of rice in Thanh Hoa, Thai Binh, Ha Son Binh, and Vinh Phu have suffered serious damage. Along with preventing and controlling harmful insects, the production installations and localities are making full use of the existing capabilities in order to keep water in the fields and pump water to the rice that is in boot and that is heading and conserving water for the rice at the end of the season.

In the south, more than 265,000 hectares of winter-spring rice, or 34 percent of the area sown and transplanted, has been harvested. Along with harvesting the rice, the localities in the south have plowed 158,000 hectares, which is 40 percent faster than at the same time last year, and sown and transplanted 10,600 hectares of summer-autumn rice.

The season for planting winter-spring vegetables and subsidiary food crops is almost over. The area planted in various types of subsidiary food crops, vegetables, and legumes this winter-spring season has increased greatly. The entire country has planted 485,000 hectares in subsidiary food crops, an increase of more than 15 percent as compared with the same period last year (a 16 percent increase in the north and a 4 percent decline in the south), and 158,000 hectares in vegetables and legumes, an increase of 18 percent as compared with the previous winter-spring season (a 16 percent increase in the north and a 22 percent increase in the south). In the subsidiary foods crops pattern, there is 112,700 hectares of corn, an increase of 15 percent, 223,100 hectares of sweet potatoes, an increase of 7 percent, and 109,000 hectares of manioc, an increase of 23 percent as compared with last year's winter-spring season. The area planted in short-term industrial crops has increased 5 percent as compared with last year's winter-spring season. In particular, the area planted in soybeans has increased 42 percent. But the sugar cane area has declined 83.3 percent as compared with last year's winter-spring season.

11943

CSO: 5400/4356

VIETNAM

BRIEFS

NORTH FACES CROP PESTS, DROUGHT--Peasants in northern Vietnam by now have harvested 900,000 hectares of winter-spring rice, about 80 percent of the transplanted acreage. Due to unfavorable weather 370,000 hectares of winter-spring rice were subjected to crop pests, and 260,000 hectares were threatened by drought. To make up for this loss, peasants in northern Vietnam are enlarging the acreage under summer-autumn crops. [Text]
[Hanoi International Service in English 1000 GMT 3 May 87] /9604

CSO: 5400/4357

RED LOCUSTS INVADE SOUTHERN PROVINCE

Lusaka TIMES OF ZAMBIA in English 7 Apr 87 p 1

[Text]

A SWARM of red locusts has invaded some parts of Southern Province posing a serious threat to crops.

As a result the International Red Locust Control Organisation for Central and Southern Africa has appealed to people within the member countries, Zimbabwe, Malawi, Mozambique, Tanzania and Botswana to immediately report the presence of the insects whenever they are spotted.

Director Dr Saul Moobola disclosed in Ndola yesterday that the locusts invaded Namwala ten days ago where they had infested an estimated area of about 60 square km.

The infested areas are in and around Namwala boma, Kafue flats, Mbuwira, Chombwe, Shaloba, Mangogo near Itezhi-Tezhi dam and Kwala.

The organisation has dispatched a spray aircraft and helicopter to try and wipe out the insects.

/9317

CSO: 5400/168

-- END --